

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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SPECIAL NOTICE.—The List of Applications for Shares will be closed at an early date, the successful carrying on of the Company being already assured by Subscriptions in advance of this Prospectus.

Captain JOSIAH THOMAS, of Dolcoath, who inspected the Mulberry Tin Works on the 27th of January last, reports as follows:—"The workings have been carried on by an open cutting from surface. There is an almost inexhaustible supply of stuff. The cost of breaking, tramping, stamping, and dressing is about 2s. 6d. per ton, leaving a profit, with tin at the present price (£66 per ton), of about 2s. 2d. per ton of stuff, or £30 per ton of tin. The natural advantages of this mine are very great. Being situated in the side of a hill no pumping machinery is required, and no mining, in the ordinary sense of that term, such as sinking shafts, driving levels, &c. The profits will simply depend on the amount of stuff treated."

Captain HAMBLEY reports:—"You are taking to the works as a going concern, fully opened and proved, and of a character free from speculation. I have been manager of these works for the last 23 years, and am, therefore, in a position to speak about them."

The Mulberry Tin Works, Limited.

Incorporated under the Companies Acts, 1862 to 1880, whereby the liability of Shareholders is limited to the amount of their Shares.

CAPITAL £100,000, IN 100,000 SHARES OF £1 EACH.

PAYABLE—1s. per share on application; 4s. per share on allotment; 5s. per share three months after allotment; and 10s. per share six months after allotment.

Shares may, if so desired by the Applicant, be paid up in full on allotment, and will be entitled to Dividends pro rata. In view of the Continuous Profits now being made, it is intended to declare Quarterly Dividends, the first of which will be paid in September next.

DIRECTORS.

Mr. Alderman BANTOCK, Coalmaster, Wolverhampton—CHAIRMAN.
GEORGE LUND, Esq., 1, Queen Victoria Street, E.C.
CHARLES MILES, Esq., 64, King William Street, E.C.
W. J. NORTH, Esq., Newquay, Cornwall.
EDWARD SMITH, Esq., Manor Park, Lee, S.E.
E. PAGET THURSTAN, Esq., M.D., B.A., 14, Colosseum Terrace, N.W.

AUDITORS—JAMES COOPER, Esq., 3, Moorgate Street Chambers, E.C.

Messrs. T. FULLER, CARTER, AND SON, Gresham Chambers, Basinghall Street, E.C.

SOLICITOR—W. J. SMITH, Esq., Abchurch Chambers, E.C.

BANKERS—Cornwall: Messrs BAIN, FIELD, HITCHINS, AND CO., Redruth.
London: THE CONSOLS BANK (Limited), 42, Parliament Street, S.W.

SECRETARY—Mr. JAS. RODGER YOUNG.

REGISTERED OFFICES,—11, CLEMENT'S LANE, LOMBARD STREET, E.C.

PROSPECTUS.

This company is formed for the purpose of acquiring and developing the property known as The Mulberry Tin Works, situated in the parishes of Withiel and Lanivet, near Bodmin, in the county of Cornwall.

These works are virtually a trading concern, free from the uncertainties of mining operations. The tinstuff has not to be sought for (as in ordinary mines), but is exposed to view in a vast quarry, where it may be taken away in the mass for a very long time to come, as the accompanying reports will show. Large profits are now being made with the existing inadequate appliances, but it is intended by means of the capital now offered for public subscription to lay down tin dressing plant on a scale commensurate with the extent of tin ground laid open for taking away, and thereby proportionately augment the profits.

It is proposed to erect plant which will be capable of returning 100 tons of black tin monthly, and this at a profit of only £25 per ton (the present rate of profit being over £30 per ton) will give £250,000 yearly, or equal to 30 per cent. per annum on the entire capital of £100,000.

The works being taken over as a going concern making continuous profits, the success of the company is not dependent upon the public subscribing any particular proportion of the shares now offered. The list of application for shares at par will therefore be promptly closed at an early date, after which shares will be obtainable only by purchase in the open market.

The directors particularly call the attention of intending subscribers to the annexed reports, on which the above statements are based, and also invite them to visit the works and ascertain for themselves the bona fide nature of the undertaking—a course which has been duly pursued by a special committee of the board.

The property is leasehold, held on lease for 21 years from 1881, at a royalty varying with the price of tin, 1-18th being a maximum. It has belonged to late years to Thomas Martyn and others, and was sold in 1881 to Captain David Cook (on behalf of himself and others), who is the vendor to the company. The vendor is the promoter of the company, and has fixed the purchase-money (including the profit of himself and partners) at £40,000, payable, as to £20,000, in shares, and as to the remaining £20,000, in cash, by such instalments as the directors may decide. The board have fully investigated these dealings with the property, and are satisfied that the proposed terms are fair and reasonable in the interests of the general body of shareholders.

The contract of purchase is dated the 17th day of March, 1882, and is made between David Cook, of the one part, and the company, of the other part. This must be assumed by applicants for shares as the only contract needing to be set forth in this prospectus under the Companies Acts, it being the only contract affecting the company other than the usual arrangements for labour, materials, &c., in connection with the carrying on of the works.

It is intended to apply in due course to the committee of the Stock Exchange for an official quotation of the shares of the company.

Applications for shares must be made on the form accompanying the prospectus, and must be sent, together with the deposit, to the secretary, or to either of the bankers of the company.

REPORT OF CAPTAIN JOSIAH THOMAS. MULBERRY TIN WORKS.

Dolcoath Mine, Camborne, Jan. 28, 1882.
GENTLEMEN,—I visited these works yesterday, and, having made a thorough inspection of the same, beg to report thereon as follows:—"A large tin deposit has been worked on more or less extensively for some time past. It is composed of soft killas (clay-slate), interspersed with small branches of tin, having a general direction of about north-east. The workings have been carried on by an open cutting from surface, and are about 100 fms. long, 10 to 12 fms. wide, and about 20 fms. deep. The stuff after being broken is tramped direct into the stamps, and being very soft can be very easily and cheaply stamped and dressed. There are three sets of stamps on the mine, worked by water-power—two water-wheels driving 36 stamps each, and the other water-wheel 32 heads, making a total of 104 heads, capable of stamping, when in full work, upwards of 100 tons of stuff per day. During the winter months there is an abundant supply of water, but in summer the water falls off, and only a portion of the stamp-heads can be worked. I find from the books that during the past year 15,769 tons of stuff have been stamped (or about 50 tons per day), and that the sales of tin have been 52 tons 9 dwts. 0 gr. 12 lbs., so that the average produce has been about 7½ lbs. of black tin (tin ore) per ton of stuff, worth, at the present price of tin, about 4s. 8d. per ton of stuff. The cost of breaking, tramping, stamping, and dressing is about 2s. 6d. per ton, leaving a profit with tin at the present price (£66 per ton) of about 2s. 2d. per ton of stuff, or £30 per ton of tin. A deep level has of late been brought up to the tin deposit, 14 fms. deeper than the former level to the depth of which the deposit had previously been worked, and the stuff at the deepest point is of about the same and possibly a little better value * than in the upper workings; so that there is every reason to believe that with a fair price for tin there is an almost inexhaustible supply of stuff to be obtained for a very long time to come.

I was informed by the agent that during the past month 7 tons 15 cwt. of black tin had been produced—about 6 tons from Mulberry and 1 ton 15 cwt. from Wheal Prosper, and that the actual profit made on this after every cost had been paid was £220, equal to a profit of about £30 per ton of tin, which agrees just exactly with the above estimate.

The natural advantages of this mine are very great. Being situated in the side of a hill no pumping machinery is required, and no mining in the ordinary sense of that term, such as sinking shafts, driving levels, &c. I cannot see that much, if any, improvement can be made in the mode of working, and with a fair price for tin the profits will simply depend on the amount of stuff treated. In order to increase the returns of tin more stamping and dressing machinery must be erected, as the present machinery is fully supplied with stuff. There

is a steam-engine on the mine of 20-in. cylinder, which at one time is said to have worked 72 heads of stamps, but if this is set to work in its present position the stuff from the lower level will have to be drawn up to it, which of course would be attended with constant expense. This engine can be removed lower down the hill, so as to admit of the stuff being tramped into the stamps from the lower level. The cost of building a new engine-house, removing the engine, and erecting 72 heads of stamps and the necessary dressing-floors would probably not exceed £1500. This would be capable of stamping 100 tons of stuff per day, and would, no doubt, double the present returns of tin. The cost of stamping by steam will, of course, be greater than by water-power, perhaps about 6d. a ton, but even then a profit of 1s. 6d. per ton of stuff could be made with tin at its present price.

You will see, therefore, that the profits will depend mainly upon the price of tin. If tin should again fall to the price of about three or four years since (£35 per ton) no profit can be calculated on; but it should be remembered that the present price of tin is not much above the average price of the last 30 years.

* It will be seen by the prospectus that the directors propose to employ more capital, and to extend the workings to a greater extent than that contemplated in Capt. Thomas's report. It is also intended to take steps for turning the water-power to much greater account. The resulting economy per ton of stuff treated will enable good profits to be made with tin at even £35 per ton.

REPORT OF THE WORKING MANAGER. MULBERRY HILL TINWORKS.

Lanivet, Jan. 2, 1882.
These works are situated in the parish of Lanivet, in the county of Cornwall. The tin is embodied in killas or clay-slate, easily stamped, and, as it is being worked as an open quarry, is cheaply obtained. The bottom level lately driven enables us to open the tin ground 14 fms. deeper than before, and I find that this ground is giving at least one-third more tin than any previously worked, and there is no question that it will go on getting richer as we go deeper. In my opinion, the engine now standing at the top level should be moved and put at the bottom level, where there is every convenience for laying down stamps, dressing-floors, &c. This engine will work 64 heads. There are now 102 heads of stamps on the mine, driven by three water-wheels; but, considering the immense deposit that we have, and the position the works are now in to return tin cheaply, I would suggest that vigorous working be at once commenced; and, as there is any quantity of stuff to work at, the proprietors need have no fear about dealing with the matter on a large scale. The returns will only depend on the amount of work done. You are taking to the works as a going concern, fully opened and proved, and of a character free from speculation. I have been manager of these works for the last 23 years, and am, therefore, in a position to speak about them.

REPORT OF MR. GEORGE HENWOOD, MINING ENGINEER. To the Proprietors of the Mulberry Hill Tinworks.

January 5, 1882.
GENTLEMEN,—This property can scarcely be deemed a "tin mine"—it should be designated a "quarry" of tinstone, wrought by levels driven into the hill constituting it, and by winzes connecting these levels or galleries, which are also utilised as shafts, down which the broken ore is thrown to fill wagons to convey it to the dressing-floors on a series of inclined railways, by which no cost for filling or hauling is incurred, and the carriage limited to an absolute minimum. The tinstone exists throughout the entire strata in veins and in a diffused state, so that no selection is necessary or desirable; the whole mass, as broken, is ready for the stamps, and may be dealt with in any quantity for which you choose to provide machinery and returning works for dressing. This vast deposit, occupying an area of hundreds of acres, has now been proved by these levels from the surface to the depth of about 50 fms., thus laying open an amount of available productive ground that defies calculation; hitherto the works have been comparatively limited by highly remunerative, principally by the naturally irregular and uncertain aid of water-power. Should capital be employed, and machinery adequate to the capabilities of the supply be erected, returns and profits can be indefinitely realised.

The ore is raised by the simple process of blasting the mass in wholesale bulk, 10 men's labour being equivalent to that of 40 or 50 in a tin mine proper; the cost of procuring is, therefore, nominal, not exceeding one shilling per ton. Such a statement may possibly be supposed hyperbole; it is nevertheless a fact. I visited and reported on this property some 10 years since, and am gratified to find the predictions I then ventured on have been fully realised, and that the deeper levels have gradually and greatly improved in quantity and quality of ore from what was found in the upper series. I venture further to predict the same gradual improvement will be found to an unknown depth. I find you have a noble and new 60-ft. water-wheel erected and employed, thus increasing the total water-stamps to upwards of 100 heads at various points, in addition to the steam-engine capable of driving 60 heads. This large number is supplied by less than a dozen men in breaking the ore.

I should advise removal of this engine from its present position at the upper level to the lowest; though it may entail a little cost and delay, it will be true economy. I would also suggest and urge the erection of not less than 500 or even double that number of heads driven by steam, utilising the water-wheel power for improved self-acting dressing apparatus, for which they are admirably suited; the tin ore is quite equal to the average of mine tinstone, is far more easily stamped, as the stuff is not hard capel, granite, or chlorite, but killas or clay-slate, and friable quartz; it is free from mundle, iron pyrites, wolfram, tungstate of iron, and other impurities, so that it requires no calcining, and commands the highest prices, as it makes grain tin without refining. The works require little or no timber, good roads are through the sett, coal obtainable at easy cost, and the dues unusually moderate. Under these circumstances, in my opinion, it is positively impossible to find a property offering higher or more palpable inducements to extended and vigorous operations, or to be more depended on, if you prefer to continue your present limited and inadequate methods and appliances. I see by your letter you desire me to express an opinion of the value of the property, if only approximate. This I fear I should have some difficulty and delay in doing; your plant on the ground applicable to present and partially for future operations I can set at £10,000 value. From the premises and description above given, the sett must evidently be estimated at very many thousands of pounds.

GEORGE HENWOOD, Mining Engineer.

Meetings of Public Companies.

THE AKANKOO (GOLD COAST) MINING COMPANY.

The second ordinary general meeting of shareholders was held at the Cannon-street Hotel, on Monday, Mr. GEORGE CAVENTISH TAYLOR (the Chairman) presiding.

The SECRETARY read the notice calling the meeting; the report and accounts were taken as read.

The CHAIRMAN said—Gentlemen, I shall now proceed to make a few remarks upon the report. I do not propose to detain you any longer than I can help, for I have no doubt many of you will have questions to ask, to which I shall be prepared to give the fullest reply and the fullest information in my power. I beg of you to look upon me not only as Chairman of this meeting, but also as one of the largest shareholders in the company, and that my interests are exactly identical with yours both for good and for bad. If you will now refer to the report I think the first paragraph which calls for any remark on my part is the fifth, where reference is made to the death of Mr. Bonnat. It was most unfortunate for this company that Mr. Bonnat died at the time he did. He was residing in Paris, and went out to the coast on business of his own. The deed for his signature was sent out for him to execute, but unfortunately it only reached there two days after he died; consequently, we were thrown back in the way explained in the report. We say, in the sixth paragraph, that a period of four months was unavoidably lost owing to this unfortunate occurrence. I think that is putting it in a very mild form indeed, for although four months might be the actual time, still it has cost us, I may say, a year, for we lost a season, and in tropical countries if you lose a season it means that you lose a year, and I may say that a great deal of our subsequent trouble has arisen from that very circumstance. It would take me a long time to explain to you that the delay in getting the title completed was increased by French law, and it is hardly necessary for me to do so. The next paragraph to which I will call your attention is paragraph eight. Mr. Ammsden, who sailed on Feb. 25, has no doubt arrived on the coast by this time, as we heard of his arrival in Madera. He has orders to employ native labour to clear up the mine. He has taken money to engage the men, and to pay the rent of the mine, and I suppose we shall hear from him in the course of three or four weeks. With respect to the ninth paragraph, which refers to the steam launch and lighter, I am happy to say that I have received an answer from Messrs. Forrest (to whom I wrote a few days ago), stating that the lighter would be completed in ten days. The houses also for the use of the manager and white workmen are now almost completed. With regard to Mr. Lane's going out it is proposed that he should go out early in May, and he will take with him the lighter and launch, and also these houses, and as soon as he gets there he will have these houses put up, and make all the arrangements for opening up the mine. In the next paragraph you will see that reference is made to the election of new directors. It was a foregone conclusion, I may say, for some time past, that a vacancy occurred. Lieut.-Col. Arbuthnot should be elected to fill it. He is the largest shareholder in the company, and has had considerable experience; and I trust, therefore, that it meets with your approbation. (Hear, hear.) I do not propose to say more about Messrs. Jordan and the new machinery, for we had a special meeting devoted to that, and we thrashed it out so thoroughly that I do not propose to say anything further on the subject unless I am asked. With regard to the sixteenth paragraph, you must remember that it takes a very long time to start a new enterprise, and a mine is no exception to the rule—in fact, from what I hear of mining it takes as much to start a new mine as any other business whatever. (Hear, hear.) I dare say we have been much disappointed at not having made more progress; but let me remind you that some of the Indian mining companies have been in existence for about three years, and are not yet developed, and have not produced a single ounce of gold. I can only say that I am a shareholder in three of them. In fact, many of their difficulties out in India have been owing to want of proper machinery. There is one mine, in which I am a shareholder, started with most glowing prospects two years ago, and the other day was talking to one of the directors, who is a friend of mine, and I asked him about it, and he said—

"The fact is we broke down first with the machinery. It came out in this way. We had machinery, and we stated in the prospectus that we had quartz on the bank ready for crushing, and machinery ready to crush it; but when we came to the operation it was the old story of the dog that could not wag his tail but the tail wagged the dog—that is to say, the machinery was not powerful enough to crush the quartz, but the quartz shook the machinery all to pieces." Consequently they were subjected to delay, and the expense of obtaining new machinery, and they have not yet got it to work. I trust now we shall make a fair start, and obtain results within a reasonable time. I will not be so absurd as to prophesy when these results will be obtained, but I hope and believe it will be as soon as it can possibly be accomplished. I will call your attention to the auditors' report, in which it states that the vouchers are to be sent home from the coast within a short time—I mean the vouchers with respect to the £233, 14s. The books containing those vouchers and documents arrived only last Thursday, and you will readily understand that as yet we have not had time to consider them, as we only got them on Thursday afternoon. What will probably interest you more than anything I have said is the information of the first item to which I will refer is the cost of the expedition to the Gold Coast. It does seem a very large sum, and I think it is so myself, but I always knew that it would be, and I said so. But you must not suppose that the directors did not do everything in their power to keep it as low as possible. I did so, and also my colleagues. We passed a minute to that effect, and in a letter we gave every instruction to those forming the expedition that there should be no expenses whatever which were not absolutely necessary. Here is the letter addressed to the board in reply:—"We beg to say, for the information of the board, that in ordering the necessary instruments, machinery, stores, and goods for the purpose of this expedition, we have been careful to purchase only what was necessary for the purpose, and with a due regard to economy; at the same time it must be borne in mind that many of the materials purchased will be serviceable in the future opening out of the mine." That letter is signed by Commander Cameron, Mr. Wyatt, and Mr. Cornish. With respect to what is there, I cannot tell you what is now on the spot, but we shall know when Mr. Ammsden writes a letter home. He will inform us, as the accounts, and we shall be able to see what there is there and let us know, and Mr. Lane also has instructions when he goes out to investigate the matter, and let us know. But we know that there are three houses, and a lot of gunpowder and gin, and two surf-boats. Well, gentlemen, I do not propose to detain you any longer now; but I shall be happy to give you the fullest information I can in reply to questions. With these remarks I move that the report and accounts be received and adopted.

MR. ROPER asked whether the houses were being taken care of.—THE CHAIRMAN said they were.—In reply to a further question by Mr. ROPER, the CHAIRMAN said the machinery and goods would be taken by surf boats over the bar of the river Axim, and transhipped into the lighters and towed up the river.

MR. ROPER thought the cost of the expedition to the Gold Coast was large, and a little further explanation should be afforded regarding it.

THE CHAIRMAN said the expedition consisted of Commander Cameron, Mr. Wyatt, Mr. Cornish, and three English miners, and the company had to insure their lives, and the passage money, as many of the shareholders were aware, was very high to that part of the coast. The item also included the expense of taking several Kroomen labourers from Sierra Leone down to the mine.

THE CHAIRMAN, in reply to a further question, read the items contained under the head of "Miscellaneous Expenses."

MR. ROPER drew attention to the current expenses, which he considered large, particularly the directors' and trustees' fees and salaries.

THE CHAIRMAN said the item included preliminary expenses, the payment of which, in many companies, was spread over a number of years, but here they had been paid off.

MR. ROPER suggested whether it would not be cheaper to put the company in some accountants' office?—THE CHAIRMAN said it could not be done. The board did think it over, but several of the shareholders considered in an undesirable course. There were about 600 shareholders, many of whom were continually going to the office, and he believed it would be quite as expensive to have the company in an accountants' office as in its own offices.

MR. ROPER said he certainly considered the expenses bore too high a proportion to the capital.—THE CHAIRMAN said they had paid for the mine, and 10s. per share had been called up, and a considerable part of it expended, and there was 10s. more to call up.

MR. ROPER said he did not blame the directors for the delays which had taken place, but he must urge upon them to exercise every economy. (Hear, hear.) MR. ADLER considered that directors' fees should not be paid until something was paid to the shareholders.

THE CHAIRMAN: I do not know whether you expect to get directors to serve you for nothing. As a shareholder in a company in which I was not a director, should object to unpaid directors, for they will not attend to your business. (Hear, hear.) Of course, the directors remuneration was fixed by the Articles of Association, which any shareholder might have seen before he subscribed for the shares; but I may say that this meeting cannot alter the remuneration, but I think we should have it altered; at the same time we are prepared to accept a lower rate of remuneration. I take no blame myself for the past. I was asked to become a director of this company, and also to become Chairman, and I accepted, but I have not the least wish to be a director or the Chairman. The work has been arduous; I have been at the office at least five days out of every six, and since I have been Chairman I have been several times a day, and shall have to go several times a day, or your business will suffer. (Hear, hear.)

MR. LESLIE said that, of course, the shareholders did not expect the directors to work for nothing. He asked whether the trustees would receive any remuneration? Replying to other questions and remarks, he said the vendors did pay the preliminary expenses up to a certain point, but they did not pay the expedition expenses to the Coast, which he considered were preliminary expenses. Why Mr. Lane did not go out before was because the dispute about the machinery question necessitated his remaining in this country. Besides, owing to the season, Mr. Lane could not have done anything if he had gone out, so the expense would have been incurred for nothing.

Lieut.-Col. ARBUTHNOT said that when he became a trustee no proposition was made that the trustees should receive a gratuity for acting, but it had been arranged that the directors intended to offer that gratuity to the trustees. (Hear, hear.) The trust was now over, and done with.

MR. GETHIN also referred to the expenses, which he considered high. As regarded the payment of the trustees, he did not think anything further should be said on that point, except to thank the gentlemen who had acted as trustees. He questioned whether, under the Articles of Association, the directors were authorised in paying a special remuneration of \$500 to Commander Cameron. Looking to the facts that vouchers for the expenditure of over \$500 had not been received from the coast, he moved that the accounts be not accepted at present, but that some investigation of the accounts be made, and that the meeting be adjourned to that day three weeks.—MR. WHITE seconded this motion, and expressed his concurrence in the views of Mr. Gethin.

MR. BAXTER (solicitor) said that under the Articles of Association the directors

* See, however, the report of Capt. Hambley, who says, "This ground is giving at least one-third more tin than any previously worked."

were fully empowered to make the payment they had done to Commander Cameron for services rendered. Mr. WATT, referring to the cost of the expedition, said that the gentlemen who thought it high must bear in mind that it included the cost of taking 30 Kroomen from Sierra Leone to the mines, a distance of about 900 mls. The property was over 3000 acres in extent, and cross-roads had to be cut. Mr. JACKSON (auditor) said a shareholder had expressed his astonishment that the auditor had treated £24, as vouchers which was not vouched. The balance-sheet dealt with money actually spent, and the auditors in their report stated that it had been spent and not vouched for, but when the vouchers came of course they would be carefully examined.

Mr. AUBREUS said it would be injurious to adjourn the meeting, as it would tend to perpetuate disagreements, and nothing could be more undesirable, because it injured the value of the property, and indirectly affected the efforts of the directors to make the company a great success. (Hear, hear.) Therefore, he hoped Mr. Gethin would not press the amendment, but allow the accounts to pass. It was a prominent part of the prospectus that such an expedition should be sent out to the gold coast, and it was an additional guarantee that everything would be done for the property. He did not see that they stood in any other position than shareholders in new mining companies were accustomed to stand in.

After further discussion ensued, in which Mr. Crane, Mr. Millburn, and some other gentlemen took part; but the discussion was very much of a conversational character, and generally referred to matters of detail, of no public interest. The CHAIRMAN asked Mr. Gethin if he still pressed his amendment?—Mr. GETHIN replied that he did.

The amendment was then put and lost, only six hands being held up in favour of it. The motion for the adoption of the report and accounts was then put and carried, with only two dissentients.

A vote of thanks to the Chairman and directors brought the proceedings to a close.

EAST CHIVERTON MINING COMPANY.

A meeting of shareholders was held at the account-house of West Chiverton Mines, after paying a visit to their mine, and inspecting the dressing-floors, lead-house, &c., on Wednesday, March 22.

Mr. PATRICK C. DON in the chair.

The usual preliminaries having been disposed of, the statement of accounts for 20 weeks ending Jan. 21, were submitted, and showed a balance of liabilities over assets of 1479l. 15s. 4d. No lead was credited, but it was understood that a sale would take place shortly after the meeting.

On the motion of the CHAIRMAN it was resolved that the accounts be received and passed, and entered in the cost-book.

The manager read his report as follows.

March 11.—At the suggestion of our secretary I forward my report (thus early to enable him to issue it with the notice convening the meeting, to be held on March 22) of the operations carried on during the past four months, and of the general prospects of your property, which I am pleased to say continue to improve as operations progress. Since the last general meeting capital progress has been made in getting the engine-shaft down to the 100, which shaft, with pitwork and ladder-way, is completed to the bottom, and the cross-cut south towards the lode is 105 fms., and will, I expect, reach the lode in about 3½ fms. further driving, when, as I stated in my report at the last general meeting, that in consequence of the greatly improved strata of ground our then bottom level—the 90—compared with the levels over, I would advise driving a level east as well as west, having some 400 fms. on the run of the lode eastward from the engine-shaft whole to the 52, at which depth some 40 fms. have been driven, and although the ground was very unsettled, the indications were decidedly good for the production of silver-lead, and the occasional patches of rich ore met with, warranted me in thinking we should meet with equally good results in driving east our deeper levels, as the ground west of the engine-shaft has proved below the 74. The 90 west of the engine-shaft is still in ore ground, and runs 15½ fms. per fathom. A fine looking lode, and holding out good indications to improve in value. We have already driven through mineral ground to this (90) level for 35 fms. in length, which, as I said before, speaks well for the 100 coming under it, also knowing the result of the 100 in the mine to the west. The slope in the 90, west of the shaft and east of the winze, is being stopped up and communicated to the 74; as it approached the 74 it became poorer; this I fully expected; had it continued up to the 74 as rich as it was at our last meeting we should have sampled our usual 50 tons of silver-lead in time for our general meeting, to be held on March 22. However, I must admit, and I am pleased to do so, the piece of ground alluded to has turned out more lead than I expected, in fact, has far exceeded the valuation I had formed in my own mind. The lode, west of the winze, to end of the level, is standing whole to the 74, thus forming a valuable reserve of ore ground, this we shall commence to stop as soon as we cut into the ore at the 100. It will be seen by the former part of my report that our cross cut at the 100 is getting very near the lode. We are pushing this end forward with all possible speed; the end is being driven by six first-class men at 4 fms. per fathom for the whole distance, in order, if possible, to intersect the lode in time for the meeting on March 22. The intersection of the lode at this still deeper point of settled ground will be carefully watched by all interested in the future of this mine, and looking at the fact of the mineral lengthening out so extensively in the 90, I have not the slightest doubt in my mind we shall have a far greater extension of profitable ground in our present bottom level (the 100), eastward, as well as west, the importance of which it will be, perhaps, premature to anticipate, as I have already stated we have over 400 fms. on the run of the lode in this direction. We have a suitable steam-whim, cage, and boiler, charged in our last statement of accounts, and paid for. The only extra expense now to be incurred as regards this machine will be in the erection of same; this would have been accomplished ere now but for two reasons. The first is a little difficulty in acquiring the proper site; secondly, masons in the district are just now scarce, work being for the time very plentiful. But I may here state the mine has not suffered in any way through the delay, as I arranged for additional horses to draw the stuff at night. We shall now have the advantage of long days to erect our whim, and I do not hesitate to say we shall have ready a long work for 12, as we should have done in the winter months for 2, and by the time our 100 is opened up the whim will be completed ready for drawing. Therefore, taking all things into account, I consider we shall have profited by the delay. In conclusion, I beg to say that if the 100 opens up as we may reasonably expect it to do, the probabilities are our property will prove equally as valuable as the mine to the west has done, which produced, between the 70 and 140, mineral (silver-lead and blende) that realised over 600,000l., which fact can be proved by the sales of ore block. We shall, shortly after the meeting sample another 50 tons of rich silver-lead, and that without trespassing on our reserves above the 90, and as we have the 100 coming in under it, all in whole ground, and as the lode runs the whole of the extent of the sett from west to east, nearly a mile long, I feel that I cannot speak too sanguine of our prospects, I may say almost immediate prospects.—RICHARD SOUTHEY.

The report was approved.—Capt. SOUTHEY, in reply to a SHAREHOLDER, said that the 100 cross-cut was not yet up to the lode, but must be very near, and they might cut it any day.

A discussion took place as to the desirability of commencing to drive east.

Capt. SOUTHEY strongly advised that no time should be lost in so doing, and on the proposition of Mr. HOSKIN it was resolved that the 50 be at once driven east.

Mr. HOSKIN proposed, and Mr. HOSKIN seconded, that a call of 5s. per share be made payable to the secretary by two instalments of 2s. 6d. each, payable on April 12, and May 12 respectively. The usual discount of 5 per cent. to be allowed on all amounts paid on or before those dates.

The committee were instructed to effect an insurance against accidents for the next twelve months with the Employers' Liability Company. The meeting closed with a vote of thanks to the Chairman and committee.

WEST CHIVERTON MINING COMPANY.

A meeting of shareholders was held at the mine on Wednesday, March 22.

Mr. ISAAC LOVELAND in the chair.

The SECRETARY having read the notice convening the meeting, the minutes of the previous general meeting were read and confirmed. The statement of accounts for twenty weeks ending Jan. 23, showing a debit balance, after allowing for bad calls, overestimated mineral, and sales of spare materials, of 5798l. 9s. 5d., having been submitted, it was resolved, on the proposition of the CHAIRMAN, seconded by a SHAREHOLDER, that they be passed and entered in the Cost-book.—Capt. SOUTHEY then read his report, as follows:—

During the past three months we have been carrying out the suggestions of the two mining experts, Capt. Kendall and Vivian, by the driving of the 70 cross-cut, south of Hawke's shaft, and the 80 east. In the former we have not met with any well defined lode, but at the same time a decided change in the ground has taken place within the last 2 fms. driving, there being more quartz with a good deal of muddle with water issuing freely; last price for driving, 10l. per fathom. In the 80 east we have better shaftmen driving. Lode is kindly, but at present is still unproductive.—Tribute Department: Tribute has not come forward as I expected, and the only reason I can assign for it is—several mines in the neighbourhood are being worked, consequently, labourers are more in demand, and most of our old tributaries prefer a certainty to an uncertainty. We have, therefore, only one pit underground, and two at surface. Looking at these facts together with such immense quantities of water we have to cope with I do not see how this mine can be carried on without continuous calls on the shareholders.

It was resolved that the report be received and together with the minutes of the meeting be printed and circulated among the shareholders.

A letter addressed to the Chairman of the meeting respecting the largely increased amount of bad calls was read.

The SECRETARY, in answer to the Chairman, said—He was in a position to give an explanation of every particular in the accounts. He had gone very carefully into the whole matter, and provided himself with a written statement expressly to supply them with all possible information. With regard to the very serious increase in the amount of bad calls he had a letter to submit to the meeting which dealt with the principal part of "bad calls" ascertained since—4317l. 7s. 5d. Of that amount 3367l. 5s. was due from one Irish gentleman, and 337l. 15s. from another. Both parties were in liquidation, the latter having failed for some 20,000l., with assets of about 1500l., only, so nothing could be expected from the latter. In the case of the former a small dividend was offered, and after he had read the letter in reference to same he would ask the shareholders present to pass a resolution thereon. Letter read as follows:—

Finer's Hall, Old Broad-street, London, E.C., March 21.

WEST CHIVERTON V. GRUBB.—We have heard from our Irish agents that a meeting of the creditors of the above has been held and a composition of 2s. 6d. in 12, was proposed, and all the creditors seemed inclined to take same. Of course the resolution is subject to confirmation. From Mr. Grubb's statement of affairs it appears that his liabilities are 19,429l. 14s. 5d., as against 5100l. 10s. assets, and as the two largest creditors, whose claims together amount to nearly 17,000l., consent to accept the offer made by the debtor, we see no other alternative but to accept the composition offered. We shall be glad to hear from you with instructions.—STACKPOLE and SON.

It was then resolved—"That Messrs. Stackpole and Son be instructed to accept the composition offered."

Mr. SHARP: I thought every shareholder was aware of the other heavier amount of "bad calls," having, on every statement of account that has been issued for the past two or three years, stated that of the arrears of call "about 1000l. must be considered bad and doubtful, as stated at the last meeting." Of that amount we lost between 500l. and 600l. through a gentleman, who held his shares for a long time, dying deeply involved, and whose estate was not administered to. Another shareholder died owing the mine 75l., estate in Chancery. Another became bankrupt, owing for calls some 50l. I have mentioned the principal defaulters, the remainder make a long list, but the whole of the defaulters names, &c., were handed to the solicitors of the company in accordance with resolutions passed from time to time. Other items were satisfactorily explained.

On the motion of the CHAIRMAN, and seconded by Capt. Southey, it was resolved that a call of 2l. per share be made, and that the same be payable to the bankers in three instalments, as follows:—1l. per share forthwith, 10s. per share on or before May 22, and 10s. per share on or before July 22, 1882. Interest at the rate of 5 per cent. per annum to be charged on all amounts remaining unpaid after the time appointed for the payment of the instalments respectively.

The meeting having been made special in accordance with the notice, it was proposed by Mr. SHARP, seconded by the CHAIRMAN—"That underground operation be suspended, and in accordance with the covenants of the leases the mine with its machinery and materials be offered to the lords of the mine, and if they declined that the materials underground be drawn to surface, and the machinery and materials be offered for sale by public competition or private contract, or by both, at the discretion of the executive in the interest of the adventurers."

It was then resolved—"That the executive without delay do personally wait upon the agents of the Lords to submit and lodge with them the special resolution just passed, and to urge upon them the desirability of a reply with as little delay as possible, in order to put a stop to the heavy costs in keeping the engine working."

The proceedings terminated with the usual complimentary vote.

CATHEDRAL CONSOLS MINING COMPANY.

The ordinary meeting of shareholders was held at the offices of the company, Drapers' Gardens, Throgmorton-street, on Wednesday,

Mr. JAMES LABY in the chair.

Mr. EDWARD ASHMEAD (the secretary) read the notice convening the meeting, and the minutes of the preceding meeting, which were confirmed. The accounts for the four months ending with the costs paid Feb. 6 showed a balance of liabilities over assets amounting to 1567l. 7s. 2d. The labour costs on the four months amounted to 601l. 10s. 1d., and the merchants' to 2187l. 5s. 4d. The following report was read by the secretary:—

March 25.—Engine-Shaft: This shaft is sinking below the 80, by nine men, at present carrying the shaft 16 ft. long, for the reception of bearers and cistern, and bringing down the main rods, as we have to fix a plunger-lift to take the water coming from the old mine at this point. This when completed will be a great saving in fuel, also in the wear and tear of the machinery. The lode in the shaft is 2½ ft. wide, and for about 4 ft. of the western end worth about 1 ton of copper ore to the fathom. This with the ore ground to the west, and the section of ground taken away by the old workers, showing the dip of copper to be east, more than ever confirms our opinion that this shoot of ore will soon be in the shaft, which will be pushed on with as little delay as possible. The 60 west has been driven 8 fathoms, where we communicated with the old mine workings; the lode in the bottom is 2½ ft. wide, and interspersed with copper throughout. In the old mine level, which is 2 fathoms above, we have cleared and secured, cut ground, and put in permanent brick dam, making all secure from an influx of water from the old mine. The lode in the 60, driving east of the shaft, is 2 ft. wide, but at present poor.—Lawry's Shaft: Since the last general report we have put a rod from the engine to this shaft, dropped an 8-in. pitwork, and forked the water to the 10, and are now engaged clearing the cross-cut north, which we will still push on, and require timbering. Our prospects at present are more encouraging than for some time past, also confidence has been restored among the men employed, enabling us to work the mine more efficiently.—STEPHEN DAVEY, STEPHEN DAVEY, JUN.

The CHAIRMAN said—Gentlemen, I think we must all consider that the report presented by our agents very satisfactory indeed. When we last met we had just got the water out of the mine. Since then a great deal of work had been done in clearing the adits and erecting a dam for preventing the recurrence of an inflow of water into the mine. We have likewise touched on some of the riches of the old mine, of which you see a stone before you. That contains 47 per cent. of copper, and I can only hope that we shall have many tons of the same valuable mineral in equally good proportions. I may say that you should be very much indebted to the committee of management, especially to Mr. Waddington and Mr. Petrie, who have given us invaluable services. They have on various occasions gone to the mine without any expense whatever to the shareholders. So far as Mr. Walton and myself are concerned, we have looked after the accounts in town connected with the office, and I think you will all agree that we have done the greatest amount of labour at the minimum of cost. When you look over the balance-sheet I think you will see that the costs have been very moderate indeed, and I hope that before the next meeting we shall be in a position to get some returns of ore to assist still further to reduce the costs. Any information which you may require will be readily given, and I now beg to move—"That the accounts and report now read be passed and adopted and printed and circulated amongst the shareholders."—Mr. MARTIN seconded the motion, which was carried.

Capt. DAVEY said the ground in the bottom of the engine-shaft was looking very kindly, and not only that, but they had stones of copper in it. In the western end from the shaft the rock was of a more mineral-bearing character than it had been higher up, and, no doubt, as they got further down the ore would be seen for a greater length of the shaft. They would probably find the ore in fact at the next level, and then they could take it away. He had no doubt whatever that a little lower down they would have ore in paying quantities.

Mr. WADDINGTON remarked that the great object was to get the shaft down to the 80 fm. level as soon as possible. The adjoining mine—West Damsel—had been very rich at about that depth, and he had seen blocks of nearly solid copper in that mine from 3 to 4 ft. wide.

On the motion of the CHAIRMAN, seconded by Mr. WADDINGTON, a call of 2s. 6d. per share was made.

The CHAIRMAN then proposed a resolution similar in terms to that adopted at North and South Penstruthal with regard to the effecting of an insurance to meet the responsibility of the Employers' Liability Act.

Mr. A. J. HAWKES seconded the proposition, which was carried, and it was decided that the men should be asked to sign a form accepting the terms of the insurance.—The meeting closed with a vote of thanks to the Chairman.

NORTH PENSTRUTHAL MINING COMPANY.

The ordinary general meeting of shareholders was held at the offices of the company, Drapers' Gardens, Throgmorton-street, on Wednesday,

Mr. JAMES PETRIE in the chair.

Mr. EDWARD ASHMEAD (the secretary) read the notice convening the meeting, and the minutes of the preceding meeting, which were confirmed. The accounts showed that in the four months to Jan. 28 3 tons 8 cwt. of black tin had been sold, realising 227l. 17s. 1d., while the labour costs and merchants' bills for the same period had amounted to 1448l. 9s. 11d. The balance of liabilities over assets amounted to 9167l. 3s. 7d. The agents' report was read, as follows:—

March 27.—Highburrow Shaft: This shaft is sunk 8 fms. below the 120 fm. level in the granite, which is changing and becoming more friable as we get out of the influence of the elvan. We calculate to reach the 132 in about three months, where, from the nature of the rock and the good indications we have in the 120 west, there is every reason to expect copper in paying quantities. The lode in the 120, driving west of shaft, is 4 ft. wide, composed of quartz, chlorite, muddle, and a little black oxide of copper. This end is driven 24 fms. west of shaft. The lode in the 108, driving west of shaft, is 3 ft. wide. Composition much the same as the 120, this is driven west of shaft 30 fms. The 58 cross-cut is driven north of Highburrow lode 55 fms., and we calculate to reach the Galloway lode in 10 or 12 fms. further driving. The lode in the rise in the back of the 88 is poor. This rise will be communicated with the winze sinking below the 72 in the course of the month. We would remark that as depth is obtained leaving the influence of the elvan, the ground is softer and more mineralised, as indicated from the good appearances of the lode at present in the 120.—S. DAVEY, W. FOLKINGHORNE.

The CHAIRMAN said: Gentlemen, we have nothing to boast of so far as regards actual discoveries. All who are thoroughly acquainted with the mine are agreed that the prospects have considerably improved since our last meeting. Our agents since that meeting have been working mainly on the lines laid down by Capt. Josiah Thomas, of Dolcoath, in his report of Nov. 3 last. In that report Capt. Thomas remarks—"A more congenial kind of granite should be looked for, and as there is a change in the 120, as compared with the levels above, the shaft should be sunk as rapidly as possible to ascertain what further change may take place in another level." This portion of the work our agents have been pushing forward, and owing to the granite proving to be of a softer and more congenial character better progress has been made than might have been expected, and the Highburrow shaft is now down to the 128. We purpose sinking to the 132; I think you are aware that this shaft is not sunk upon the lode. Probably at the required depth a short cross-cut will have to be driven north to cut the lode, when we hope to report a further change for the better at the increased depth, which I need hardly say will be very gratifying to your committee as well as to Captain DAVEY and the shareholders. I now move the adoption of the report and accounts.

Mr. HERITAGE, in seconding the motion, asked how far they would they have to drive the cross-cut for the lode at the 132?—Capt. DAVEY: About 2 fms. we calculate from the underlay of the lode.

Mr. HERITAGE:—Are we as well off sinking a perpendicular shaft as if you sunk on the lode?—Capt. DAVEY: It is not exactly a perpendicular shaft. The rock in the bottom of the mine is better than anything I have seen before since I have been connected with it, and it is the same with the western level at the 120. It is better for the production of minerals and softer for working. We have been driving 5 fms. 1 ft. 6 in. a month at 4l. 18s. per fathom. The 108 we are driving 3 fms. 9 ft., which is a little harder, and is costing about 6l. a fathom. We must get away from the elvan's influence before we can expect a change in the granite which is likely to conduce to beneficial results. I say without hesitation and any disinterested agent who understands his business would corroborate the statements I am making with regard to the promising appearance of the bottom of the mine. Until the last 10 fms. we have not been clear of the elvan. The appearance in the bottom of the mine are better now than at any former period. We think we have gone through the elvan, because we have seen nothing of it now for 25 fms. We are sinking 9 ft. a month in the shaft.

Mr. HERITAGE: I feel it due to the management to say that a more creditable balance-sheet than this it would be impossible to see, because all the money seems to be spent on mining.

Capt. DAVEY: We spend the money as judiciously as possible.

Mr. HERITAGE: There is certainly nothing thrown away on the London office.

The SECRETARY announced the relinquishment of forty shares.

The CHAIRMAN proposed a call of 4s., payable on the 17th April. The debit was less by 200l. than at the last meeting.—Mr. WADDINGTON seconded the motion, which was carried.

It was resolved to insure the company against any liability under the Employers' Liability Act in the Norwich and London Accident Insurance Association. It was stated that the men paid the greater part of the insurance premium and the company the remainder.

Mr. HERITAGE said it was a wise arrangement.

The committee, by a further resolution, were authorised to dispose of the forfeited shares on the best terms obtainable.

On the motion of Mr. HERITAGE, the proceedings closed with a vote of thanks to the Chairman and mine agents.

SOUTH PENSTRUTHAL MINING COMPANY.

The ordinary general meeting of shareholders was held at the offices of the company, Drapers' Gardens, Throgmorton-street, on Wednesday,

Mr. E. ASHMEAD (the secretary) read the notice convening the meeting, and the minutes of the previous meeting, which were confirmed.

The accounts for the four months ending Jan. 28 showed that the liabilities over assets were 882l. 4s. 8d. The costs of labour were 700l. 14s. 7d.; for merchants, 539l. 16s. 2d. The total expenditure from the commencement two years ago was 12,091l. 14s. 7d.

March 27.—Walton's Engine-Shaft: The shaft is cut down to the 70, drawing lift fixed, with rods and stays complete; also permanent footway, with dividing and casing, and the shaft is sunk 4 fms. below this level, where the lode is 5 ft. wide, composed of chlorite, quartz, and muddle, with occasional good patches of black oxide of copper embedded in a beautiful granite; the ground has considerably improved in character for mineral in the last 9 ft. sinking. We have cleared and secured the 60 cross-cut north about 70 fms. to Clay lode and the levels east and west on its course; the lode at present in the ends is poor. The 30 cross-cut is driven south about 84 fms., and is at present letting water freely, indicating our nearing a lode or branch.—Flat-Rod Shaft: The water is drained to the 130, which is the bottom of the mine. Here a cross-cut was driven north by the former workers about 2 fms.; lode cut, which is from 8 ft. to 10 ft. wide, composed principally of quartz and muddle. The lode has undergone a great change from that in the levels above, quartz having taken the place of chlorite, which we consider a good indication for the production of copper ore. The shaft has been cut down to the 120, and skip-rod brought down to the 110; also fixed 8-in. plunger pole, with rods, stays, footway, &c., at the 100. This shaft will require to be cut down and enlarged from the 120 to the 130, which, with the other preliminary work, fixing lift, bringing down rods, skip-rod, footway, &c., will take from 10 to 12 weeks, when we shall at once commence to sink the shaft and open on the course of the lode. The men are making good progress with the cutting of the 40 bob-plat, and which we hope to complete in the course of a month. I would remark that looking at the large lode in the bottom of the mine, and the great change that has taken place, future prospects are encouraging.—STEPHEN DAVEY.

Capt. DAVEY remarked that the lode was principally composed of the constituents set forth in the report. The quartz was congenial, and the gossan had gone down in some places to the 70 and 80, but they have got under it now. He then proceeded to explain the position of affairs by means of a map of the workings. He added that in Walton's engine-shaft there was good ground, and a fine looking lode, with a little black oxide of copper. The ground had considerably improved in the last 9 ft. He recommended the sinking of both shafts without any delay whatever. He would recommend putting back the 110 west into the unwrought ground. They were sinking the shaft at about 2½ fms. a month with nine men. There were 60 fms. between the engine-shaft and the flat-rod shaft. The first bunch of ore lasted to the 60, and the flat-rod shaft was down to the 130 fm. level.

Mr. M'KEAND said that the experience of West Basset was that bunches of ore were met with long before they got to the 130.

Capt. DAVEY, in reply to further questions, said they were still driving the cross-cut.

The CHAIRMAN: I can add very little to the report of Capt. DAVEY. The committee are very pleased to have succeeded in getting the water out, and to have reached the bottom of the shafts. We had hoped to have done that earlier, but the shafts were in such a wretched condition that it took a great deal of time and expense. Among the items of our expenditure was one of timber, upwards of 800l. worth of which had been swallowed up in the shafts. Our prospects are considerably brighter and more encouraging than they were when we met four months ago, and we hope by-and-by to have something much more favourable to report to you.—Mr. M'KEAND seconded the motion for the adoption of the report, which was agreed to.

Capt. DAVEY said they had not anticipated draining the mine in less than 17 months. They had enormously improved the shafts. The engine-shaft had been cut down 100 fms., and securely timbered. The flat-rod shaft had been cut down more or less from surface to the 120. The time had not been thrown away.

The CHAIRMAN: The committee are pleased and satisfied with all done, and are assured that no time has been lost, and that the expenditure of money had been judiciously made.

On the motion of the CHAIRMAN, seconded by Mr. WADDINGTON, a call of 5s. a share was made, payable on the 17th April.

Mr. ARTHUR said the arrears were 510l. Before making another call, it was desirable that pressure should be brought to bear upon these persons.

The SECRETARY: We have received a part since the accounts were made up, and have sent out pressing notices. We believe all the money to be good. Out of a total of over 11,000l. in calls, 500l. only is in arrears.

Resolutions similar to those passed at North Penstruthal meeting in reference to the Employers' Liability Bill, and allowing for forfeited shares, were agreed to, and the meeting closed with a vote of thanks to the Chairman.

WEST WHEEL PEEVOR.

A four monthly meeting of the adventurers of this mine was held at Wheel Peevor account-house, on Thursday,

Mr. T. PRYOR, the purser, in the chair.

The statement of accounts showed that the labour cost for the 16 weeks was 1731l., merchants' bills, 819l., banker's charges, rates, &c., 55l., Wheel Peevor four months water charges 100l., lords' dues, less income-tax, 112l., making a total of 2819l. On the other hand, the tinstuff sold from Dec. 22 to March 29 realised 2267l., showing a loss of 552l. The call made last time of 10s. per share realised 1440l., and there was left a balance against the mine of 1379l.

The CHAIRMAN stated that this account included all labour cost to March 4, and merchants' bills to the end of January. They would see by Capt. White's report that a great deal of dead work had been done and plant laid down since the last meeting. Their returns had been increased by 1419l. compared with those at the last meeting, showing that they were making rapid strides. The tinstuff sold would average as close as possible 34 per ton. That spoke for itself. The tinstuff sold (773 tons) would produce about 44 tons of ore.

The agents reported as follows:—In presenting you with the following report we beg to state that at the time of our last meeting we had about 4 fms. more to sink the engine-shaft in order to reach the 45. This we have done, and have also driven 15 fms. of cross-cut to the lode at that depth, and effected a communication between the shaft and the winze sunk in the lode from the 36 to the 48. We have again commenced to sink the engine-shaft below the 48, and we have another pair of men busily engaged in dividing and casing the shaft between the 38 and 48, and fixing the runners for the cage to draw from that level. This will be done as quickly as possible, as we shall then be in a position to draw direct through the shaft from the 48 the very rich tinstuff we have ready for breaking there. The lode in the 48 driving west is worth 12l. per fm.; when we commenced to drive this end west of the winze referred to above we had a very rich lode of tin, which held for several fathoms driving. The lode being subject to changes of this sort, we think very little of it. The lode in the end at present has every appearance of again entering into a good run of 11 ground. This end is now driven west of winze about 14½ fms. (or about 29 fms. west of the boundary). The 48 is now opened up for 22 fms. in length, 15 fms. of which are through a good length of tin. We have commenced to sink a winze in the bottom of the 48, which we propose carrying 12 ft. long; the lode for this length we value at 100l. per fathom. This is a good point, and will be forced on with all the speed possible so as to effect a communication with the engine-shaft at the levels below in far less time than would otherwise be the case, as well as open up a rich return of stopping ground. The lode in the 36 fm. level, driving west, has very much improved during the last few fathoms driving, worth for tin 20l. per fathom. This is now our pier, and going east, which is driven 55 fms. to the end of the boundary. The run of tin ground we now have in this level we shall be sure to meet with in the 48, and will, we feel certain, be far richer in quality. We purpose cross-cutting south of the engine-shaft in the 48 as soon as convenient for the Wheel Diamond lode, which are in that direction. We have four stopes working on tutwork, the lode in each—on an average—worth 12l. per fm. Having referred to the lode in our upper levels in previous reports, we need not repeat it again, as we hope to set the same to tributaries to work in these in a short time. We found after our last meeting that it was necessary to get our 60-inch engine to work as soon as we could, as the small one we had was getting unequal for the work required. We have fixed our rods in the shaft, put our bitwork in order, and both the engine and rods are working remarkably well. At surface our work is being carried on as fast as possible. Since the last meeting we have completed the tramroad direct from the shaft to the stamps. This will save the expense of carting. We have put several new round buddles in the dressing-floors, which are now working well, built and completed four commodious slime pits, made and fixed a separate for the rough and from the slime before entering the pits, erected a long tossing house for the white, and the masons are now busy building the new calciner for burning the same. A new dry and a sampling house have been built, and another 16 heads axle to the stamps are being put in. The returns during the past sixteen weeks show an increase on the previous 16 weeks of 1319l., and we hope for the coming 16 weeks, with the very good prospects we have for working, that we shall show a more satisfactory statement of accounts than what we have shown to-day.

Capt. WHITE added that probably some persons might look upon the valuation of the lode in the winze now sinking in the bottom of the 48 fathom level as being very great for that district. Well, it was a good valuation he would allow, but nothing more than what the lode was really worth. They gave it from actual assays and what the stuff broken from it realised in its sale the

previous day, 4 tons 19 cwt. 2 qrs. of stuff having brought 30s. 6s. 6d., or about 62 per ton of stuff as it was broken. He might further add that the produce of this stuff was fully 2 cwt. to the ton. They would see from this, he thought, that they were within the mark in valuing it at 100s. per fathom for the length of the winze, 12 ft. The next thing was to get some of it out, and this they would try to do. As they had seen from the accounts presented that day, their returns had increased pretty much since the last meeting, having raised over 45 tons of black tin, being between 11 and 12 tons of tin per four weeks, and the quantity raised in the last four weeks was over 13 tons. He hoped they should still go on increasing. The prospects of the mine he considered to be most excellent, such as, he thought, no mine agent could be too sanguine of. They proposed now as soon as they could to put a cross-cut out south to the Wheel Diamond lode at the 45 fathom level, and also north to the Wheel Pevor middle lode and north lode. These were also good points. They had done a good bit of work at surface during the past 16 weeks as was stated in the report, and he trusted that all this was to their satisfaction. They considered that in the way they were laying out the mine they should be able to return their tin at a much cheaper rate than has hitherto been done. He considered the prospects of the mine were never so good as at present, and that the time was not far distant when a good profit would be made.

On the motion of Mr. J. W. MICHELL, seconded by Mr. H. HARVEY, the accounts were allowed and passed.

The CHAIRMAN suggested that a call should be made. It was his opinion the shareholders would stand in a very much better position if they had a clear book by making a call sufficient to cover the balance. It was plainly shown in many cases that a debt hanging over a mine kept down the price of the shares. If they had a clear book he believed they would make sufficient profit by the next meeting to enable them to enter the Dividend List, where he believed they would remain for many years to come.

After some discussion it was moved by Mr. HARVEY, seconded by Mr. CHELSEA, and carried unanimously, that a call of 13s. per share be made, which would clear off the adverse balance. This concluded the business.

GREAT HOLWAY LEAD MINING COMPANY.

The ordinary general meeting of shareholders was held at the company's offices, Great St. Helen's, on Tuesday, Mr. W. WYLLIES MACKESON, Q.C., in the chair.

Mr. E. J. BARTLETT (the secretary), read the notice convening the meeting and the minutes of the preceding one, and the report of the directors and statement of accounts (previously circulated) were taken as read.

The CHAIRMAN said: Gentlemen, I appear here in the new character of Chairman of this company, in consequence of the lamentable illness of my old and respected friend, Sir Stephen Walcott, and my first duty is to move—"That the balance-sheet as made up to March 14, together with the directors' and agents' reports taken as read, be received and adopted. Most directors so dilate on the pleasures of hope that they almost persuade their shareholders to prefer the anticipation to the reality. I prefer the pleasure of memory, particularly when it takes the pronounced form of a paid dividend. Some people say that shareholders do not care where the dividend comes from so that they get it. I do not think that is your way of viewing the matter, nor is it the board's. They prefer to tell their shareholders where the dividend comes from, so that it may be taken as an earnest of what they hope will prove recurring dividends in the future. Where did this dividend come from? Gentlemen, it came from such stuff of that (holding up two rich specimens of lead). Those pieces I brought myself from the mine, and it is from the same stuff that your dividend of the past year and your dividend of the future has been and will be secured. I like to enter into particulars, and I hand out round a table showing month by month the production of lead and blende ores from this mine. You will see that we have raised and sold about 10,000 cwt. of lead and blende, or at the rate of about 100 tons of stuff per month from March 14, 1881, to March 14, 1882. It is not ore which has been lying by, and gathered up to be dressed and sold for the occasion. No; this table purports to show you the ore that is raised, dressed, and sold during the month, so that you have the price of what we are to expect during the next 12 months. You find it somewhat difficult to make that arrangement, but should raise, dress, and sell each parcel of ore within the month; but with the assistance of our secretary a splendid system has been established. This 10,000 cwt. is a very small amount of what we have a right to expect in the future. Prices, however, can hardly go lower, and we are, perhaps, fortunate in commencing under such circumstances, for any advance in the lead market will necessarily increase our monthly returns. Now, gentlemen, our produce has not come from simply one pocket, or from a temporary strike, but as you will see from the report of Capt. Harris, although principally from the level engine-shaft, the workings at least four other shafts, from 100 to 200 yards apart, have during the past 12 months helped to swell our receipts. Again, at the level engine-shaft we have from eight to ten pitches, each of which gives a large proportion, so that if one fails we have many others that we can rely upon. This month we have sold already 130 tons of lead and blende, an increase upon what we have done before, partly attributable I admit to the very fine vein in which the north and south lode is turning out, producing, as you have been told, rocks of lead exceeding in weight 1½ cwt. I wish you to know that we are perfectly satisfied with every part of the management of the mine. We have arranged our correspondence with the manager so that we know to a nicety what each pitch in each shaft gives us, and whether it is paying or otherwise. Again, every month we compile a revenue and capital account, so as to be able to say how much we pay on revenue and how much we pay on capital, and thus regulate our proceedings in the extension of the works. We next come to the dead or exploratory work, of which we are doing a large amount. This may bring us into new lodes at any moment, as indeed it did in the 95, at Roskell's shaft. Two or three months ago we commenced with all possible energy to open up Eytton and Partridge shafts. With a little overhauling the whole of the plant, engines, boilers, &c. except pitwork, are ready, and the shafts in a very short time will be in a position to realize to us the great expectations held forth concerning this portion of the property. Far away beyond the level engine, towards the coal measures, we are informed by our captain that if we sink a shaft we shall have riches certain to our hands, and towards this our workings at the level engine-shaft are turning. Then, again, at True Blue, on the mountain, a few men, without the aid of machinery, are now raising some very fine looking stuff, and we are completing sinking a shaft, which will take us right into the body of the True Blue lode. There are several other points of a similar character, all of which are under consideration. Not a single month has passed but that some of the directors, or the secretary, have been present watching the advances that are made. We had first to complete the dressing floors, which have been set throughout with flagstones. The upper floors show dimensions of 102 square yards, and the lower floors 315 square yards, and we have put up an excellent storehouse, and made three large reservoirs. Most elaborate dressing machinery has been erected on the floors, worked by water-power, and over the top of the roof we have a complete system of water, our dressing cost is brought down to and fixed at the very low figure of 10s. 6d. per ton. We have also constructed a saw-mill, &c. With regard to prices, our average for lead has been 11s. 8s., and for blende 3s. 15s. 8d. On comparison we find our neighbours averaged 10s. 6s. 6d. for lead, and 3s. 6d. for blende; leaving us with 22s. 6d. more for our lead, and 13s. more for our blende; and why is that? Partly from the character of our ore, but very much, I think, from the manner in which we dress it. In conclusion, the directors call upon you to put faith in their statements. One gentleman was here last time, who curiously enough met me when I was spending the long vacation at Holywell, as I hope, for the benefit of the company. After seeing everything he had the candour to say, "There is not a single word of your speech at the meeting which was not in accordance with the facts—so much so that the whole place might have been photographed from your remarks." You must all believe in our statements, and if you support us the dividends will be doubled, or even trebled. Money is wanted, not because we are in difficulties, but because we want to develop the capacities of this magnificent property. There are 200 acres as yet untouched, and, therefore, it is that we are desirous of completing our estate, the 800 acres. The motto of the directors has been, "Whatever thy hand findeth to do, do it with thy might."—Major ADDISON seconded the motion.

Mr. WILLMOTT said he had no intention of criticising what the eloquent Chairman had said. It was not every company who had a Queen's Counsel for Chairman, and a practical man as well. (Hear, hear.) At the same time, they must not be led to expect too great things. When he was here last year he expected 25 per cent. after the eloquent speeches he heard. But do not let the shareholders imagine that they had found gold.

Mr. BARTLETT: We have found something better, I hope. (Laughter.)

Mr. WILLMOTT went on to say that their secretary was almost as eloquent as their Chairman. He (the speaker) was, however, hoping that something very good would result during the year. He went to the property, and had the pleasure of seeing the Chairman there up to his knees in mud, and working like a Briton. It was very satisfactory to see him there—(hear, hear)—and, at the same time, he was not even Chairman. Gentlemen of the legal profession were usually talkers, not workers, but in the Chairman there was the happy combination. At the same time he was a little too sanguine; and, by-the-by, did he or any of the directors ever go down the mine? He knew Mr. Bartlett did, and, in fact, that gentleman was the backbone of the concern. He had great confidence in his judgment and great faith in his prudence in the direction of affairs. He had noticed, however, that a Col. Smith, of the Royal Engineers, had been added to the board; but he would like to know, though an engineer, what was his mining experience. He would much rather have seen a man of business, and, in fact, he would like to see at least six directors, and such men should be placed on the board who would be prepared to go down the mine, for whatever they had at surface, the stuff underground was the pivot of the whole concern. The Chairman had undoubtedly worked hard to bring matters to their present issue, and he was very pleased to hear that within the last month a great discovery had been made, and which had qualified him to speak with the eloquence he had done to-day.

Mr. J. WALKER said he was not an unbeliever at the last meeting, and he was not one at this. He was sure they were all delighted at the report of the Chairman, and the increased value of the property during the past 12 months. Undoubtedly the property was valuable, and the moment it began to pay a dividend, that was the moment when shareholders began to take an interest in it. He found, however, that they had issued 800 more shares, and he wished to ask why this had been done without first consulting the shareholders. He would like to know how it was that sundry debtors had grown since the last year, why they were debited with two years' interest, and the share capital now being 54,000, how came it that 2½ s. was paid as a dividend instead of 200s., or 5 per cent. on the full amount? He was extremely satisfied with the report, and it was gratifying to note that whereas the receipts recorded for 1880 only amounted to some 2500s., in the last 12 months the sales had been 10,000.

Mr. E. J. BARTLETT: I am much obliged to you for the questions you have put, and hope I shall be able to answer them satisfactorily. With regard to the two years' interest charged to the debit of profit and loss account, it will be in the recollection of shareholders that at the last meeting we did not go into the question of profit and loss, but simply showed expenditure on one side and receipts on the

other. Therefore the profit and loss is, in this balance-sheet, debited with two years' interest. (Hear, hear.) With regard to the dividends, it is true there are 10,800 shares issued, but I may tell you that upon those 800 shares no dividend has been paid. It is very proper that some explanation should be given why they were issued, especially as at the last meeting it was thought that we should have ample capital for the concern. From the remarks that have dropped from the Chairman you will see that we have, without being too sanguine, a grand property to develop, and circumstances occur sometimes between one meeting and another which make it desirable that we should attack with greater energy a certain portion of the property. This has been the case between the present meeting and the last, and 800 shares were allotted, but upon them, as I have said, no dividend has been paid. Therefore 2456s. represents the amount paid in dividend, 44s. being kept back in respect of arrears. With regard to the western portion of the site, Eytton and Partridge shafts, I am very glad that we are now attacking it with great energy. Every farthing expended here will almost immediately give us a good return. I am not too sanguine. It is not a question of the legends of old miners, which I generally receive with distrust, but I am confident, from a consensus of testimony, that as soon as the water is taken out of Eytton and Partridge shafts, we shall find the lead. I recollect when this part was working before, and when a return of 60 tons a month or more was being made, and I am perfectly certain that when the water is taken out of the shafts we shall within a month be in the market with our lead. (Hear, hear.) By the judicious employment of more capital we shall attain great results from this western ground. I hope, therefore, you will not be led to think that the money has been unwisely expended. As to the item of sundry debtors—if we have anything like a successful year in 1882-3, that item, I expect, will be doubled; at any rate, I hope so. (Hear, hear.) A portion of that is put down as due for lead and blende ore that we have delivered, and for which payment has since been made; it also includes amounts due on the 800 shares recently issued, a fair proportion of which, I am pleased to say, since the balance-sheet was made up, has been received. Another item of the balance-sheet I wish to see very much increased is the expenditure upon Eytton, and, with the works in full swing, I hope that if we live, and have the pleasure of meeting you this time next year, that we shall find a "one" before this entry of 6922s., and that it will represent actual sales of ore; for, as we deal with such firms as Walker, Parker, and Co., and all the great smelting-houses, there is very little fear that we shall make a bad debt. (Cheers.)

Mr. WALKER: What credit do you give?

Mr. BARTLETT: About a month for blende, but not so much for lead; and for some of the probable cash. We never accept a bill. (Hear, hear.) As you would not doubt like to have some further information in regard to the mine since the issue of the report dated March 17, I may say that I have a letter from Capt. Harris this morning, in which he says that the 95 north is worth 2½ tons of lead a fathom. The directors and myself were anxious to ascertain whether the lead held good in the roof and bottom. In regard to the roof we could easily prove the character of the vein there, and I am glad to say that during the last few days he has put on a full staff of men, and have now got an additional stop, which is worth 2 tons of lead to the fathom. I suppose, next to the level engine-shaft, he says, the various tribute pitches and stopes are producing the same as for a long time past. Brammook shaft pitches are yielding 1 ton of lead and 2 tons of blende per fathom. If you look at your prospectus you will find that we called attention to the upper workings explored by our predecessors. We only expected to find certain pitches which men could take on tribute, and afford the company a slight profit; but the results have exceeded our expectations, and there is the prospect of great prosperity at that point. It is a great satisfaction to me, and I trust it is to you, to know that every part of the property we have attacked has exceeded our expectations as to value. With the good management we have at the works, and with the good management I trust you think we have in London, we shall be able, I doubt not, to meet you next year with a much more satisfactory statement, and be in a position to circulate among you a few more of those dividend warrants, an instalment of which you had but recently. (Cheers.)

The CHAIRMAN, in reply to a further question, said the directors would pay off the small amount of debentures (1825s.) whenever they thought it desirable.

Mr. ARTHUR THOMAS proposed the election of the retiring directors, Major J. W. Jones, and Col. J. H. Smith, R.E.

Mr. Wm. J. WALKER said he objected to the election of Col. Smith, because he was not a practical man. He thought they wanted the mercantile element upon the board, and he proposed Mr. Heyer.

Mr. WILLMOTT advocated the claims of Mr. Thomas.

The CHAIRMAN said he did not know Mr. Heyer, but he did know Col. Smith, and when a vacancy occurred he was glad to have the opportunity of identifying such a man with the company. Four years ago he inspected the whole of the mine, and was able to do so intelligently from his great engineering experience. Col. Smith had been employed by the Government for years, and a better director could not be found if all London were searched. He asked the meeting to pass the resolution, and promised that the board would consider what had been said.

Mr. HEYER, whilst thanking the gentlemen who had proposed him for a seat at the board, stated that he had no intention of serving as a director, and begged that his name might be withdrawn.

After a desultory conversation the resolution was carried unanimously, Mr. Wm. J. WALKER seconded the motion, which was agreed to.

On the motion of Mr. J. WALKER the meeting closed with a hearty vote of thanks to the Chairman and other officials connected with the prosperity of the company.

PRINCE OF WALES MINING COMPANY.

The ordinary general meeting of shareholders was held at the offices of the company, Gracechurch Buildings, Gracechurch-street, yesterday.—Mr. J. Y. WATSON, F.G.S., in the chair.

Mr. C. B. PARRY, the secretary, read the notice convening the meeting, and the minutes of the last meeting, which were confirmed.

The CHAIRMAN said: Gentlemen, the accounts presented to this meeting, owing to the thirteenth month of the year coming in, show five months' costs against four months' returns, and a balance of liabilities over assets of 1349s. 0s. 1d. The returns of tin had been 547l. 19s. 9d.; copper ore, 194l. 13s. 3d.; burnt leavings from the tin dressing, 50s. 10s.; total, 791l. 19s. 9d., and putting four months' costs against it, the loss in the four months' working would be about 750s. The costs are much higher than anticipated at the last meeting, while the copper ore realised much less than was expected. The ore on the mine are about 20 tons of copper and 3 tons of tin. In respect to the future the report is of a very satisfactory character. The committee have been fully alive to the desirability of sinking the shaft, but they deferred its consideration until sufficient had been seen of the lode lately cut into in the 102, and also for this meeting to decide as to the extra expenditure it will incur. The committee do not see how a call of less than 2s. per share can be avoided at the meeting, but they anticipate a larger return of tin and copper for the next four months. The report states that the lode has very much improved in the 102 from what it was in the 96; it is now large and well defined, with rich stones of copper ore and some stones of tin. Everything the agents think, seems to point to the great probability that we shall have a rich tin mine in depth.

The report from the agent was then read.

The CHAIRMAN said one or two of the shareholders had been over the mine recently, who perhaps would have something to say about it.

Mr. ROSEWARNE said he had been over the mine lately in company with Mr. Heritage. He was very much pleased with what he saw there. It was no doubt the most important thing that the shaft should be continued from the 102 fm. level. As a way, as the agent has proposed, for the better going on, and the appearances were better than they had ever been before. The stones of tin which he examined on the mine were of a rougher kind than anything seen in the levels above, and he believed they would have the experience of the Redruth and Camborne district, and that, having had a great bunch of ore near to the surface, they were now practically between the hair and the hoof. He had no doubt that as the shaft was sunk from level to level they would develop a very rich mine for tin. Everyone would induce one to work the mine for tin.

Mr. ROSEWARNE endorsed Mr. Rosewarne's observations, and added that the local shareholders who had been over the mine were very much pleased with the appearance and prospects of the mine. They, however, strongly advised that the shaft should be sunk, and they appeared to be surprised that this work had been stopped.

The CHAIRMAN, in reply, pointed out that at the last meeting they had not cut the lode at the 102, and it was decided to cut the lode and see what it was like before sinking the shaft further. The costs for five months had also been heavy, sinking four months' returns, and they would have been much heavier if the shaft had been sunk. The agent's report was very much pleased with the mine more than a month ago. The committee did not think it right to interfere with the agents in the management of underground workings of the mine; and they had certainly not ordered stopping the sinking of the shaft, as seemed to be supposed; nor, in fact, had the sinking ever been suggested by the agents until to-day.

The SECRETARY stated that every liability was charged in the accounts.

Mr. BRASLEY proposed the adoption of the accounts and the agent's report.

Mr. HERITAGE seconded the proposition, which was carried unanimously.

Some discussion having taken place with regard to the call which had been made, it was decided, on the motion of Mr. WILLMOTT, seconded by Mr. BRASLEY, that the call should be 2s. per share.

Mr. Heritage was appointed a member of the committee of management, in the room of the late Mr. Macfarlane.

The meeting closed with a cordial vote of thanks to the Chairman.

FORTUNA COMPANY.

The report of the directors, prepared for presentation at the meeting on Thursday next, shows that the profit on the past half-year's working amounted to 2492l. 15s., which shows a small decrease of 145l. 7s. as compared with the previous account, but seeing that the prices realised for the lead sold have been even less than in the six months to June 30, the result may be considered satisfactory. The output of ore from the Canada Inco and Salidos Mines shows an increase of 128 tons, the respective quantities for the two periods being—Six months to June, 1881, 2108 tons; six months to the end of December, 2236 tons. The raising at the San Antonio and San Francisco Mines during the same period were—Six months to June, 1881, 200 tons; six months to the end of December, 370 tons. The reserves of discovered ore are now estimated—At the Canada Inco and Salidos mines, 6500 tons; at the San Antonio and San Francisco, 1500 tons; total, 10,000 tons. This shows no alteration in the reserves at the old mines, but an increase of 700 tons at San Antonio and San Francisco.

The mining operations which have been carried on are fully described in the reports from the superintendents and mining agents. They show that the works of trial have been actively pursued in all the mines, and that the prospects for the current half-year are favourable. The San Antonio and San Fran-

cisco Mines have thus far opened out very satisfactorily, and promise ere long to contribute to the company's profits. It will thus be seen that the purchase and development of these mines have proved an advantageous investment of the reserve fund. The smelting results show but little variation from those of previous half-years. The work is well and cheaply done, and the produce of lead has been sent to the ports and shipped to England with great regularity. There has been a decline in the price of lead since the last general meeting. There has been about 17 ton lower than it was at that time. The last sale of silver-lead made was at 14s. 2s. 6d. per ton. The audited accounts show that the balance at the credit of the profit and loss account on Dec. 31 amounted to 2601l. 12s. 11d. 2291l. 13s. 4d., and 114s. 11s. 8d. has been placed to the reserve fund, the balance to be carried forward being 1957l. 7s. 11d.

ALAMILLOS COMPANY.

The report of the directors, prepared for presentation at the meeting on Thursday next, states that the accounts which the directors have the pleasure of submitting to the shareholders as the result of the operations for the half-year ended Dec. 31 show a substantial improvement on those of the previous six months, the profit for the two periods being to the end of June 2153l. 14s. 11d., and to the end of December 2948l. 8s. 11d. The production of lead ore during the same time was—to the end of June 1513 tons, and to the end of December 1920 tons.

Notwithstanding this increase, the reserve of lead ore discovered are now being estimated at 2600 tons. The working of parts of the mine in tribute has been continued with very beneficial results, and as in the large area of ground which the company owns numerous lodes exist on which there are old workings, this system of mining can be carried out on a large scale, and hence it will be continued with a prospect of satisfactory returns. The exploratory operations are meanwhile being actively prosecuted, and good ore grounds being opened out both in the deep and shallow levels.

The smelting of the ore, and the delivering of the lead, has been well and economically conducted during the half-year, and the works are maintained in a state of efficiency. The lead market has been in a very unsatisfactory state, and prices continue very low; they have ranged since September last from about 15s. down to 14s. per ton. The balance-sheet shows that the amount standing to the credit of profit and loss account on Dec. 31 was 3005s. 13s. 3d.; out of this a dividend of 1s. 8d. per share has been declared (2916l. 13s. 4d.), leaving a balance to carry forward of 887l. 19s. 11d.

LINARES LEAD MINING COMPANY.

The report of the directors prepared for presentation at the meeting on Thursday next states that the mining and smelting operations have been carried on with encouraging results since the last general meeting. At the mines the exploratory work has developed a considerable quantity of ore, especially at the Quinteros Mine, where the reserves are now larger by 350 tons than they were in September last. At the Pozo Ancho Mine the discoveries have just kept pace with the extraction, the reserves showing no alteration. The quantity of ore in reserve at both the Pozo Ancho and Quinteros Mines is now estimated at 9425 tons. The Majada Honda Mine, the purchase of which was referred to in the last general report, has received considerable development in the last six months, and the improvements made in the machinery, both for draining and hauling, have enabled the operations to be carried on advantageously and economically. It is hoped that a fair quantity of ore will be raised from this mine during the present half-year, and at the same time that the bottom level, where the lode appears to be rich will be opened out, so that the ore ground may be taken away to advantage.

The quantity of lead ore extracted during the half-year has been from the Pozo Ancho Mines, 1687 tons 10 cwt., and from the Quinteros Mine, 559 tons, equal to 2237 tons 10 cwt. This shows an increase of 162 tons 10 cwt. over the previous six months, in addition to which 50 tons of lead ore were raised from Majada Honda. There is no feature in the smelting of the ore calling for special remark.

The quantity delivered to the furnaces at Cordova was 2718 tons, which gave a produce in the reverberatory furnaces of 1758 tons of pig-lead, being 84.75 per cent. of the lead contained in the ore; this will be increased by the quantity of lead which will be obtained from the slags.

The price of lead continues unfavourable, and has varied but little since the last general meeting; the last sale of silver-lead made was at 14s. 2s. 6d. per ton. The profit on the half-year's working, as shown by the audited accounts, has amounted to 1514l. 8s. 4d. The balance available for dividend on Dec. 31 was 1689l. 10s. Out of this sum the directors declared a dividend of 2s. per share, 1500s., and placed to the credit of the reserve fund 100s., leaving a balance to carry forward of 594l. 10s.

FOREIGN MINES.

ST. JOHN DEL REY.—Telegram from Morro Velho, dated Rio de Janeiro March 30: Produce 10 days, second division of February, 62500 out; value 2422; yield, 3.4 oia. per ton.

March 30: Copy of Telegram received to-day from Eureka: "One body looking well, 150 tons ore at mine."

ISABELLE (Gold and Silver).—Lewins Chalmers, March 6: With regard to the mine, when I was there last, on Saturday, the miners had got down about 2 ft. on a portion of the winze chamber floor, as to which I wrote you in my last. The whole of this is intersected by seams of the richest black ore (enargite), varying in width from 1 in. to 8 in., which they were sacking and sending to the mill. I have not men to do this and push Jones's drift (also referred to in my last) further at present, but I intend doing this as soon as possible.

Geo. W. Jones: Mill Report. The mill has been running without interruption during the past week.—Average Battery Sample: Gold, 8s.; silver, 8s.; copper, about 8 per cent.—Average Mill Tailings: Gold, a trace; silver, 8s.; copper not yet assayed. Will send forward bullion bar No. 11 (1096 oz.) by tomorrow's stage. We are now receiving ore from the mine which I should judge from sample assays will average from 870 to 930 per ton in gold and silver, and from 30 to 40 per cent. copper. I intend to mix this with the ore at the mill, which will enable me to increase the value of the battery samples. Have between 3000 and 4000 lbs. of cement copper on hand, and expect to send forward another bar of bullion on Saturday.

RUBY AND DUNDERBERG.—The following telegram was received March 6 from Mr. Lewis Chalmers: "Shipped bullion 15th; 9420."

EUREKA (NEVADA) SILVER.—Report on the mines for the week ended March 6: Bald Eagle: The north drift from the 150 ft. east cross-cut is in a very favourable ground for drifting; progress this week, 24 ft.; total, 52 ft. The drift will have to be advanced about 30 ft. further to make connection with the winze from the old stopes.—Williamsburg: The east drift from the winze 2 ft. below the second level continuing good ore the full size of the drift. The above the first level are also producing some good ore. Have about 20 tons of ore at the mine ready for shipment.

CALLAO BIS (Gold).—Extracts from Mr. Donne's letter, dated Feb. 28: Azules Mines: The work of stripping down quartz has been systematically and economically carried on in this mine. The No. 1 winze is being sunk past through bluestone rock; the quartz met with, intermixed with the bluestone, is of good quality, frequently showing good colours and visible gold.—Callao (Vaino): The work of sinking this shaft has recommenced after a long interval, the hoisting engine with the machinery being in good order, and well, as is also the Cornish pump. The ground through which we are sinking is favourable, and the rock is highly mineralised, and promises well in depth.

RUBY AND DUNDERBERG.—Report on mines for the week ended March 6: Dunderberg: The drift from the bottom of the No. 7 winze below the 60 ft. level has been advanced 6 ft. during the week. There is a slight improvement in this drift since last report. The ore is rather low grade, but is increasing in value at present it is the full size of the drift (4 ft. in width). The 700 ft. winze has been advanced 20 ft. during the week; total, 15 ft. from the 700 ft. level. On the 3rd inst. we broke into a natural cave or opening containing gold ore; this cave is about 10 ft. in width and about 15 ft. in length. At the point of discovery the opening extends about 10 ft. above and 40 ft. below the drift, and an angle of about 45°. At the point of intersection the ore on the footwall is a cave of about 4 ft. in width. Below this point we do not know its size or extent. There is good ore down to the lowest point we have yet been able to reach. We have elected a windlass, and will proceed to explore it as far as possible. I consider this a very important discovery, as it is in new ground, and if it extends upwards it will be west of all the upper workings of the mine. The 600 west cross-cut, 75 ft. north of No. 2 winze, has been advanced 10 ft. this week; work has been suspended on this cross-cut for the present and resumed the cross-cut south of No. 2 winze, the latter being the most eligible for continuing as it will prospect the ground over the discovery made on the footwall level, the north cross-cut being too far north for that purpose. The upper No. 3 has been advanced 6 ft. during the week; total 83 ft. above the 60 ft. level, the north cross-cut being too far north for that purpose. The No. 2 upper is very poor at present, and producing very little ore. The No. 1 upper continues without change. Have 23 men and 12 tributaries at work.

DINGLEY DELL ESTATES AND GOLD MINING.—Captain Williams: March 3: I notice you will within a few days have sent away an additional lot of blings and balls for the pulveriser. I wish you had sent out stamps instead, as we have two sets of amalgamating plates, which would be suitable for the batteries of stamps of four heads each, however we will do all that is possible with what you send out. As mentioned in my last, the machinery is in good order, and the wear in the machinery is still very great, owing to the speed of driving, we find it gets through the sleeves with more freedom than hitherto from the machinery sent out; we have used up three rings and five sets of sleeves, and have now left in these particular wearing portions one ring and two sets of sleeves, which we shall convert into rings when required, and four sets of hollow balls. I trust by the time those are finished the new ones will have arrived; the quartz crushed and not burnt; have washed over the tables a small portion for fear of again sickening the mercury; have put this on the side against some future day. I think the course we have adopted is the best for this kind of machinery, and I hope when a sufficient quantity has been treated the results will be satisfactory, and shall push on, believing we shall do something with it yet. We are still blasting down No. 3 reef, but as yet there is no sign of footwall, and how large it is going south I cannot say; for this not the least indication of getting through it; we have quartz cutting to exposure; the men are actively engaged in bringing in an open cutting to expose the hard bar of ground, and better progress is being made. We are still driving on the ledge of rock to the north of bungalow without much alteration in appearance. Have two other parties of men out prospecting for reefs at different places on the estate, and all discoveries will be duly reported.

PORT PHILLIP AND COLONIAL GOLD.—The directors have received the following advices, dated Feb. 14 last: Total quartz crushed for month ending Jan. 25, 2222 tons; total gold obtained, 651 ozs. 17 grs. average value, 5s. 3d.; payments, 1663s. 10s. 10d.; receipts, 1373s. 8s. 3d.; profit, 5s. 3d. 20 grs.

Mining Correspondence.

BRITISH MINES.

ASHHETON UNITED.—J. Garland, March 29: Last month ending 25th inst. a trial level was driven west on a shoot of ore in the back of the 30 west 2 fms. 5 ft.; the level became unproductive after driving 3 ft. Driving has been suspended, and the men put to stop the back in a lode, which will yield 1½ ton of lead ore to the fathom. The 20 west was driven 5 fms. 5 ft. on the north branch, which was productive till within 9 ft. of the end; it is now poor, but contains stones of lead and blende. The south footwall branch, which appears to be the main part of the lode, will yield about 1½ ton to the fathom. A rise has been started on the new shoot of ore in the back of this level west of footwall rise in a lode valued at 1½ ton of lead ore to the fathom. We have commenced from the high backs of a pitch in the 60, west of Milford's rise, to rise towards the 40; this rise, which we expect to put through in about 2 months, will ventilate the western ground in the 60 and 40 levels, a matter under working of the air machines unnecessary. The 70 west has extended 3 fms. 4 ft. 8 in.; the lode is about 5 ft. wide, and for the most part yields good blende with a little lead ore, but in the forebrest we have a harder lode than usual and less ore. We shall probably have a change in the lode before long. The tribute pitches, which are now being worked at an average tribute of 5s. 10s. per ton of lead ore, continue to yield fairly well.

BEDFORD UNITED.—H. Trezise, March 29: North Lode: The 115 east is without change since last report. The tributaries in this part of the mine are doing well. The 115 east is 5 fms. below the 110, the ground continues good for sinking, and the lode is improved in size and appearance since last report; it is now 3 ft. wide, composed of peach, munda, and grey copper, a very nice looking lode of great promise. The lode in the 30 west is 3 ft. wide, mixed with capel, grey ore, and munda. The lode in the 30 east is 6 ft. wide, and worth 20s. per fathom—as fine a lode as one could desire to see. The 20 east is suspended for the present, the men are cutting a trip-lift at the shaft. The lode in the 20 west is 3 ft. wide, composed of munda, iron, gossan, and copper. I hope to intersect the air-shaft in about another month. All the machinery is in good working order, and every point of operation is being pushed with all possible speed.

BEUNO CONSOLS.—J. Woolcock, March 29: The stope in Wood shaft is yielding good ore for the dressing-floors. New shaft: I have put the men to drive a cross-cut east to prove the full width of the lode. Engine-house Level: The adit is now cleared out in No. 1 stope. Yesterday men were engaged taking the ore broke in this stope to surface, and as soon as this is clear we shall take the ore from the small pump, then we can go on stopping and sinking. I expect the timber for the engine-house in a few days. We are getting on with the dressing as fast as possible.

BLUE HILLS.—S. Bennett, R. Harris, March 29: There is not much alteration to notice in the 80 east end. In the Blue Burrow shaft the north lode is a foot wide, and containing some good tin stuff. The 40 east end is in connection with a fault, and the lode unsettled. The 30 east end is worth about 10s. per fm.

BWLOH UNITED.—Wm. Northey, March 29: Saturday last being our usual monthly setting-day, the following bargains were re-set:—The 50 east, to be driven by four men, at 4s. 12s. per fathom, the men to clear their own stuff. For the last 6 ft. driving we met with several small faults, accompanied with small bits of quartz, east of which the stope underwent a sudden and favourable change, and the lode has greatly improved in size and character, being only 3 ft. in width, intermined throughout with kilaas, quartz, sulphur, and occasionally spots of lead ore. The 12 east under adit has been re-set, to four men, to drive at 4s. 15s. per fathom, the men to clear their own stuff; the lode is from 1½ to 2 ft. in width, composed of kilaas, quartz, and spots of lead ore. The 12 west under adit was re-set to six men, to drive at 5s. per fathom; the lode is from 2 to 3 ft. in width, of a most promising character, and worth 1 ton of silver-lead ore per fathom. The stope in the back of the 30 has been securely timbered, still fixed, &c., to enable us to resume stopping, by 12 men, at 2s. 15s. per fathom; the lode is from 2 to 6 ft. in width, and worth 1½ ton of silver-lead ore per fathom. I have placed a pair of men to clear and secure the back of the 50 to prepare for rising in back of same to meet with the run of good lead ore seen in the bottom of the 40. I have examined the lode in the forebrest of the 70 east, and find that it is from 3 to 4 ft. in width, composed of kilaas, quartz, blende, and cubes of lead ore; the present appearance and character of the lode is similar to what we have seen in the above levels. I am pleased to say that good progress is being made in draining Ritchie's engine-shaft; the water will be in for at the 30 by the 10th inst. The stope in the back of the 15 under adit has been re-set, to four men, at 2s. 15s. per fathom; the lode will yield from 12 to 14 cwt. of silver-lead ore per fathom. The stope in the bottom of the adit has been re-set, to four men, to stop at 2s. 17s. per fathom; the lode will yield from 16 to 18 cwt. of silver-lead ore per fathom. The pumping, drawing, and dressing machinery are all in good order and working well. Dressing is carried on regularly.

CARNARVONSHIRE GREAT CONSOLS.—W. H. Borlase, March 30: I beg to hand you setting report. Eudean's engine-shaftmen to cut top pit 13 ft. long by 9 ft. by 7 ft., and put in for the sum of 50s. The 14, to drive east of Eudean's shaft, at 5s. per fathom; lode looking very promising, and showing a little lead. No. 1 stope behind this end at 5s. per cubic fathom; lode when last taken down worth 20 cwt. of lead per fathom. No. 2 stope is cut through to the winze. No. 3 stope, at 3s. 10s. per fathom; lode producing 20 cwt. of lead per fathom. The stope in back of the 14, east of diagonal shaft, to raise this level with the level driven west of Eudean's shaft, at 4s. 10s. per fathom; lode worth 20 cwt. of lead per fathom. Stope west of diagonal shaft, at 3s. per fathom; lode worth 30 cwt. of lead per fathom. Having formed an opinion that the late drainage at the 8 below adit west of diagonal shaft had been driven alongside of the lead bearing part of the lode, I yesterday put two men to cut into the hanging-side, and we have to-day met with a branch of lead that will produce 3 tons of ore per fathom (sample lump sent you by rail to-day). I am pushing forward all work to enable us to start working the diagonal shaft as early as possible. An intermediate level to drive east of a winze close to the junction of the east and west lode with the counter lode below adit, at 3s. per fathom. Lode in the back of level is worth 3 tons of ore per fathom, but the forebrest is disordered by water, which will wear and shorten, and when I hope to report a good level up and down the end, which is at present producing about 15 cwt. of lead per fathom. The winze to sink in the bottom of the 11, in advance of the bottom level, at 11s. per fathom; lode worth, for length of winze, 9 ft., 2 tons of ore per fathom. Rise in back of No. 2 stope in back of adit, lode worth, for length of rise, 9 ft., 25 cwt. per fathom. Stope east of rise in bottom of the 10 above adit, at 2s. 10s. per fathom; lode worth 18 cwt. of lead per fathom. Stope west of rise, at 3s. 5s. per fathom; lode worth 20 cwt. of lead per fathom. A level to drive south-east from No. 5 stope on course of branch, at 10s. per fathom; branch when last taken down was worth 20 cwt. lead per fathom. We are sampling on Saturday 30 tons of lead for sale on the 8th prox.

COED-Y-FEDW AND PANT-Y-BUARTH.—March 30: In the 107 west we find the cross-lode so very powerful and the ground so loose that it will become days yet before I can report of having commenced to drive out. I may tell you we are in splendid ground, and as large deposits of ore are generally met with the intersection of such lodes you may expect daily to hear of a valuable discovery. In the north level on the other cross-lode the forebrest shows a good breadth of ore and clay. In the sinking below the 107 I am glad to say there is a good show of lead and blende. It is opening out well as we go down, and promises a greatly increased yield of lead. Rowland's Shaft: We are very busy with this making it secure and ready for the engine. I consider our prospects are very good.

CLOAU.—W. A. de la B. Ramsay, March 29: We cut some gold every day last week up till Saturday, when a change occurred in the character of the ground. The ground towards the west side of the winze showed some improvement, and was containing a little more lead, and some trace of blende which was cut this afternoon; this is the first I have seen in the winze or any part of the gold shoot. It always occurred along with the gold at Cloau. It will be late to-morrow afternoon before we can put any holes near this good stuff. I am rather afraid that the result of this evening's blasting will bring down a good deal of the hanging-wall, which is rather loose. Next week we shall be deep enough to begin putting in timbers. The winze is 20 ft. in depth, 11 ft. 9 in. long, and 8 ft. 6 in. between the walls of the lode. The driving west of the adit is 15 ft. long. The quartz broke up into two or three bands, the breadth of the lode being about 3 ft. The quartz yields gold in a fine and washing, but only in very minute quantity. The appearance of the place is, however, fairly good, and looks as if the lode would soon open out to a better size.

CROOK BURN.—Jacob Craig, March 29: There is nothing new to report in the ends of cross-cuts driving from shaft this week. I have had the Metal Band old level mouth opened out, also staked the level out on surface as accurately as I can do so, that the directors may see when they visit the mine how it is situated with the Crook Burn property.

DENBIGHSHIRE CONSOLIDATED.—R. Prince, March 30: We have driven out east in the 66, and struck the main lode. We shall now send out a short cross-cut—say, 7 yards from Quaker's shaft—to strike the lode, where it can be worked more economically than from the present point. In the 112 cross-cut we have reached the bottom of the soft productive ground proved in the 66. I have, therefore, set the men to rise up on one of the joints, so we may now expect to be in the lead any day. The stopes look well.

DERWENT.—J. Morphet, March 28: Accompanying this monthly report is the list of bargains set for April—Jaffrey's Shaft, Middle Vein: The 95 east of shaft continues easier to explore; now let at 5s. 15s. per fathom. The vein, which is 5 ft. wide, is composed principally of fluor spar, a little limestone, and lead ore; worth of the latter 1 ton per cubic fathom, or 1½ ton for whole width of level—7½ ft. The flats eastward over this level by side of vein are somewhat less expensive to shaft, and present indications give hope for an improvement for ore; present worth is 25 cwt., let at 7s. per fathom. The flats northward produce 27 cwt. ore per fathom, let at 6s. 10s. per fathom, and at a point several fathoms farther west the flats are yielding 25 cwt. ore per cubic fathom, also let at 6s. 10s. per fathom. Over this (the 95) we have now 3 stopes. Nos. 1 and 2 are each worth 15 cwt. ore per fathom, and No. 3 produces 17 cwt. Vein 4 ft. wide throughout—Westgarth's Shaft, Middle Vein: The two stopes on this vein east of shaft are each 4 ft. wide, and each producing 12 cwt. ore per fathom. The repairs to this shaft are now going rapidly forward. By the end of this week the shaft will be repaired, new brattice and footway fixed down to a point within 14 fathoms or so of the bottom, and when down, will be a strong permanent job.

DEVON FRIENDSHIP.—H. B. H. Daw, W. Gill, March 30: The lode in the 30 east of Bennett's shaft has considerably improved during the last few days. The lode is now 3 ft. wide, and we believe there is still more of the lode standing to the south. We are now taking down the south side, and will let you know fully on this point next week. The lode in the 30 west is 4 ft. wide, and worth 1½ tons of arsenical munda per fathom. No change has taken place in the rise in the back of this level since we valued it last. The lode in the 12, west of Bennett's, is opening out a fine lode, full 4 ft. wide, producing about 8 tons of arsenical munda per fathom, and we are continually breaking good stones of copper ore from this end. We are clearing up the winze in the bottom of the adit level. We have not yet reached the bottom, therefore we cannot report to you the actual depth. The adit end east and stope in the back of this level are without any alteration since last reported on.—Surface Operations: We have two diggers completed; one of them we shall connect to the shafting driving the old diggers, until this arrangement for driving the other three diggers are completed. This will enable us to discharge six girls now employed on the old diggers.

DEVON GREAT CONSOLS.—Isaac Richards, March 30: Wheel Josiah: In the 144, east of the count-house shaft on the new south lode, the lode is 3 ft. wide, composed of capel, quartz, munda, and a little copper ore.—Wheel Emma, Inclined Shaft: In the 137 east, east of Friend's cross-cut, the lode part being carried 5 ft. wide, is of a promising character, and yielding good stones of copper and munda ore.—New Shaft, New South Lode: In Jones's rise, in the back of the 145 east, the lode now being taken down is 6 ft. wide, and is yielding 3 tons of copper ore and 6 tons of munda per fathom. In the 115 east the lode is 3 ft. wide, composed of capel, quartz, peach, priam, and small quantities of copper and munda ore. Judging from its promising appearance, an early improvement may fairly be expected.—Railway Shaft: In the 265 and 139 west, on the south part of the lode, the drives are being carried by the side of the lode for more speedy progress. In the 75 west on the south part of the lode, the lode is 3 ft. wide, of a very promising character, and yielding good stones of copper and munda ore. In the 160 west, on the south part of the lode, the lode is 6 ft. wide, of a highly promising character, and yielding good stones of copper ore, and 5 tons arsenical munda per fathom.—Watson's: The pit at the 38, at the engine-shaft, has been completed, and the shaft is in regular course of sinking below this level, the ground in which is tolerably favourable for progress, and is congenial for mineral. In the 83, west of the engine-shaft, the lode is 3 ft. wide, composed of capel, quartz, munda, and a little copper ore. In the western shaft, sinking below surface, the lode is 2 ft. wide, of a promising character, and yielding some copper and munda ore of good quality.

DEVON GREAT UNITED.—Isaac Richards, March 30: Wellesford's shaft has reached the depth of 11 fms. 4 ft. below the 104, and at this point the lode is 2½ ft. wide, of a very promising character, and yields some copper and munda ore of good quality. In the 60, west of Watson's shaft, on the Capel Tor lode, the lode is 2½ ft. wide, composed of capel, quartz, peach, and some good quality copper and arsenical munda. In the cross-cut south in the 60, west of Watson's, the lode has not yet been met with. The ground continues favourable for progress, and is highly mineralised. In the 50, west of Watson's shaft, on the Capel Tor lode, the lode is 2 ft. wide, of a very promising character, and yields some copper and munda ore of good quality.

EAST ROMAN GRAVELS.—A. Waters, March 30: The 109 south shows a vein 4 ft. wide, worth 20 cwt. of lead ore and 10 cwt. of blende per fathom. The new stope in back of this level, directly over the winze, is worth 30 cwt. of lead ore per fathom. The 97 south on west portion of the lode is worth 25 cwt. of lead ore per fathom. The stope in back of this level, about 40 fms. from shaft, is worth 20 cwt. of lead ore per fathom, and the stope in the 86 south, one directly south of winze the other about 5 fms. south, are together worth 4½ tons of lead ore per fathom. The two stopes in back of this level are together worth 25 cwt. of lead ore per fathom. The pitch in bottom of the 75 south is worth 15 cwt. per fathom.

EAST WHEEL ROSE.—W. Skeewis, T. Dudge, March 27: North Wheel Rose: The stack for the 100 in. engine (which is 100 ft. high) is finished, and the scaffolding will be all taken down by Thursday next, after which the masons and their labourers will be all employed in building boiler-house walls and in erecting steam pipes. The cylinder of this engine (the 100 in.) has been put into its case, and as soon as the engineers have fixed and completed the steam pipes to the boiler of the 90 in. engine they will then proceed to make the joints of the 100 in. cylinder.—Penrose's: Since the last report we have received the top and bottom nozzles of the 90 in. engine from the foundry. The want of the other parts is causing great delay, as well as considerably increasing cost. We have also received sheaves for shears, one of which has been fixed and the shears lifted. The other sheave is being fixed at the bottom, but unless the remaining parts of this engine are speedily delivered we shall be compelled to remove the 90 in. engine blocks, chairs, and other appliances to North Wheel Rose and proceed with the lifting in of the 100 in. engine.—Innes's Lode: No. 1 stope on this lode continues much the same as last reported—12 cwt. of silver-lead and 6 cwt. of blende per fathom. Nos. 2 and 3 stopes have somewhat fallen off in value. This we consider to be only temporary, as from the present appearance of the lode we anticipate an early improvement. Green's dressing machinery is in a very forward state, and will be ready to work by the time the pumping, winding, and other machinery go to work.

GAYNE'S LODE.—George Rowe, jun., March 25: The lode in the 117 east is without change during the past week, being 5 ft. wide, yielding munda and ore to the amount of 18 tons per fathom. The lode in the stope in back of this level (the 117) is worth 7 tons munda per fm. The lode in the 105 east is cut into 10 ft. wide, and the part carried in the end is yielding 9 tons of munda, mixed with good quality ore, per fathom, and showing a very kindly appearance. The lode in the winze sinking below the 105 is looking exceedingly well, and worth for munda and ore 20s. per fathom. The lode in the stope in the back of this level (the 120) is worth 10s. per fathom. The lode in the 102 west has improved, a fine looking lode, now worth 12s. per fathom, price for driving 3s. 10s. This is now opening out ore ground fast. Stope in the back of this level worth 8s. per fathom. Two stopes in the back of the 90 west are worth 12s. per fathom each. The tribute pitches on the whole are turning about their usual quantities of ore. All our points of operation are being pushed on, and we are busy preparing ore for the next sampling. The computed quantity will be given in our next report.

GLASGOW CARADON CONSOLS.—Wm. Taylor, Wm. J. Taylor, March 28: South Lode: The 114 east is about the same value as last reported—8s. per fm. The lode has a very kindly appearance, and we are daily expecting it to improve. The 114 west is worth 6s. per fathom; the ground in both these ends is very favourable, and good progress is being made in driving. Harvey's Lode: The 102 west has improved, a fine looking lode, now worth 12s. per fathom, price for driving 3s. 10s. This is now opening out ore ground fast. Stope in the back of this level worth 8s. per fathom. Two stopes in the back of the 90 west are worth 12s. per fathom each. The tribute pitches on the whole are turning about their usual quantities of ore. All our points of operation are being pushed on, and we are busy preparing ore for the next sampling. The computed quantity will be given in our next report.

GOODEVERE.—R. Knott, March 29: In the drainage west from shaft the lode, I am pleased to inform you, has further improved, being now fully 2 ft. wide throughout the end, producing good work for tin. The men who have been stopping east of shaft are put to drive on the course of the lode, which is 4 ft. wide, producing low quality tin stuff. In the deep adit east, on new lode, there is no change calling for remark. The lode has a kindly appearance, producing a little good quality tin. In the stope in back of this level the lode is from 2 to 3 ft. wide, producing saving work for the stamps, and occasionally rich stones of tin. Sinking operations on this lode will be commenced next week, which will be urged on as fast as possible.

GODARD'S LODE.—R. H. Vivian, March 30: The stope east of engine-shaft, towards the middle shaft, continues to look as well as ever; worth about 15 tons of lead and full 5 cwt. of blende to the fathom. We can continue stopping in this direction for over 40 fms. in length; all ore ground. We have from 15 to 18 ft. stope laid dry, which will, we hope, turn out a good deal of lead and blende ore. Our pumping gear is now in fair trim, and keeping the mine dry with ease. We are pushing on as fast as possible.

GORSIEDD AND MELLNAR CONSOLS.—March 30: In the 90 west we are in precisely the same ground as we had in the level above before we came into the 30 west, and so I am looking for favourable results now very soon. All the tribute pitches have improved.

GREAT HOLWAY.—W. T. Harris, March 30: I have no particular change to notice since the general meeting, progressing very satisfactorily in every department.

GREAT POLGOOTH UNITED.—Wm. Richards, March 28: Engine-shaft: The general character of the ground is much the same as last reported, and the men continue to make good progress in sinking.—Wheeler's Shaft: We are sinking with all possible dispatch in a good channel of ground for the reception of mineral.—Flat Lode: We have not yet cut into the lode at this point; I hope to do so on an early day. In the cross-cut driving south of the old mine lode the ground is favourable for progress.—Tip-shaft: Here the men are engaged timbering up and securing the top of the shaft. All surface work has been pushed on with as usual.

GREAT WEST CHIVERTON.—John Curtis, March 28: Since my last report I am glad to inform you we have had more lead in the lode than I have seen for so long a time, and the munda and ore, looking kindly to further improve.

GREEN HURTH.—Jas. Folgate, March 28: The 8-man shaft is the same in value as last reported—5 tons of ore per fathom. No. 1, bottom level north, is worth 5 tons of ore per fathom. The stope in back of the above level is poor at present, and will continue so for about 2 fms. in length. No. 3 stope is worth 1 ton of ore per fathom. No. 4 stope is worth 1 ton of ore per fathom. No. 5 stope is worth 3½ tons of ore per fathom. No. 6, north end (31), is worth ¼ ton per fathom. We have commenced to enlarge the level leading to No. 4 vein. Dressing going on well.

GWYDDYR AMALGAMATED.—J. Roberts, W. Sandoe, March 29: Clementina: We have no change whatever to report, here since last week, either in the end or stopes. We are pushing on the dressing as fast as possible.—Aberllyn: The ground in the rise at No. 2 appears to be a little easier; the leader of lead on the footwall continues much the same. The stope at the bottom of No. 2 looks well for blende, and there appears to be good strong patches of lead towards the hanging side, which we must leave to stand for awhile, so as not to mix the lead too much with the blende.

HINGES DOWN CONSOLS.—Thomas Richards, March 29: The lode in the 25, east of the engine-shaft, is composed of capel, quartz, peach, priam, &c., and in places good stones of copper ore. In the 12, east of the shaft, the lode has much the same appearance, containing capel, quartz, arsenical munda, and in places good stones of copper ore. The lode in the stope in the back of this level is worth 1 ton of ore per fathom. In the deep adit level, east of the south cross-cut, the lode contains capel, quartz, and munda, and occasional good stones of grey copper ore. The stope in the back of the deep adit level on the No. 2 lode is worth 1½ ton of good copper ore per fathom. The ground in the south cross-cut continues favourable. The railway, excavations, &c., for the dressing-floors are progressing favourably.

KIRK MICHAEL.—R. Rowe, March 28: There is no change to report in either of the drivings at the 20. We sold on Monday 20 tons of lead to Nevill, Druce, and Co., at 5s. 1s. per ton.

LADY BERTHA.—T. Gregory, March 29: The lode in the 40 east is still large, with an increase of copper, producing 8 tons of good munda per fathom. The lode in the rise in the back of this level has rather improved for copper ore and munda, producing together from 15 to 11 tons per fathom. Rowe's winze below the 30 west continues to be worked and to produce over 2 tons per fathom. We are very busy in shipping and weighing off munda and copper. Machinery, &c., all working well.

LANGFORD.—R. Goldworthy, March 30: The roof of the winding engine house is completed, and I hope to get the house ready in a few days for the engineers. One mason is now busily engaged getting in the loading for the pumping engine, which will be pushed on with all speed.

LANDEGLA.—H. Hotchkiss, March 28: I am urging on the driving of the 36 yards level east with as much speed as the nature of the ground will allow. The lode has a very kindly appearance, and is from 12 to 15 in. wide, well defined, and composed chiefly of carbonate of lime. Against the hanging-wall there are favourable indications of the lode opening. The direction of this lode, as taken to-day, is 28° south of east and north of west, which I consider a very favourable point for bearing.

MELLNAR COPPER.—John Gilbert, March 29th: In the 30 cross-cut driving south of Gundry's shaft the kilaas are getting disordered again with patches of elvan, and the ground is a little harder for driving. We have cut through the elvan course, which is 2½ fms. wide in the 70 cross-cut north of the main lode east of Gundry's shaft, and the ground now is a light colour, too kilaas, very congenial for copper ore. In the 100 driving west of shaft, on the main lode, the lode is 4 ft. wide, and yielding 2 tons of copper ore per fathom, and looking promising for further improvement. The lode is 5 ft. wide, and yielding 1½ ton of ore per fathom, in the 110 driving west of shaft, on the south part of lode, and the ground is wet and spare for driving. In the 110 driving east of shaft, on the main lode, the lode is 6 ft. wide, and yielding 3 tons of ore per fathom, and presenting a very kindly appearance. The part of the lode carrying in the 120 driving west of shaft, on the main lode, is 5 ft. wide, and yielding 1½ ton of copper ore per fathom and some good stones of tin. The part carrying in the 120 east of shaft is 5 ft. wide, and yielding 1 ton of copper ore per fathom and some saving work for tin. In the winze at the bottom of the 90 west of shaft, the lode is 6 ft. wide, and yielding 3 tons of ore per fathom; this winze is about 4 fms. in advance of the 100 end. The lode is 4 ft. wide, and yielding 2 tons of ore per fathom, in the rise in the back of the 110 west of shaft. In the 110 driving east from the old engine-shaft the lode is 5 ft. wide, and yielding occasional stones of copper and tin ore. In the 110 driving west from the old engine-shaft the lode is 2 ft. wide, and yielding some good stones of tin. The lode in the stope in the back of the 40 west of shaft is 4 ft. wide, and yielding 4 tons of ore per fathom. The lode in the stope in the back of the 40 east of winze west of shaft is 7 ft. wide, and yielding 5 tons of ore per fathom. The lode in the stope in the back of the 40 west of winze, west—[Continuation of report not received].

MORFA DU.—T. Mitchell, March 30: Setting Report: We have to-day let the following bargains for another month:—The stope in the back of the 60, to eight men, to raise bluestone, at 13s. per ton, and to be allowed for securing the workings when required. The pitch in the back of the 48, by six men, to raise ore at 13s. per ton; this place is not looking quite so well during the last day or two, but we expect it will improve again shortly. The pitch in back of the 29, by five men, to raise bluestone, at 12s. per ton of ore; here we have recently struck through to some old men's workings, but we find good bluestone extending into the ends of the ground. The drive from the bottom of the winze towards the lode, at Ida shaft, by four men, at 7s. per fathom; we expect to cut into the lode here shortly, and hope soon to be able to raise good bluestone from this point.

MOUNTS RAY CONSOLS.—W. Argall, John James, John Rowe, March 28: Trebarvah: We have sunk the engine-shaft in the past month 2 fms. 2 ft. 5 in., and are now down 10 fms. 3 ft. below the 50. In another month we hope to complete the sinking of the shaft to the 60. The branches at carrying in the shaft containing copper are not as yet come together; nine men are sinking this shaft at 20s. per fathom. The 50 cross-cut, south of engine-shaft, has been driven 3 fms. 5 ft. 3 in.; this has been re-set, to four men, at 6s. per fathom. In this cross-cut we are just getting into a nice looking white elvan. In the 40, west of engine-shaft, 5 fms. has been driven during the past month. In this level we have cut the cross-course and driven about 6 ft., but not exactly yet got through it. We have re-set this to four men, at 3s. 5s. per fathom. We have driven the 62, west of Richards' shaft, 3 fms. 2 ft. 7 in., and in getting near to the winze gone down to below the 12; this has been re-set, to six men, at 6s. 15s. per fathom. We have resumed the sinking of the 57 winze, where the lode is about 100 ft. per fathom. Two men are stopping the back of the 57, at 15s. in 1½ ft. tribute; the lode is worth 6s. per fathom. There are two men working on tribute in the bottom of the 50 at 16s. in 1½ ft. tribute. Two men are also working on tribute on the north lode for tin, at 16s. in 1½ ft. We are dressing a parcel of copper ore, which we hope to sample in the coming month. The machinery throughout the mine is working well.—Sydney Cove: We have nine men clearing the engine-shaft of sand, timber, &c., and have cleared during the first month 5 fms. We are now 7 fms. below the 12. The water being rather quick, and a small fall of sand, we find it very troublesome for clearing. We have commenced to drive a cross-cut with six men from the north lode to cut Brown's tin lode; this is being driven from the 10 at 35s. per fathom. In the north part of Sydney Goldolphin portion of the set we have three men clearing the adit level, and as soon as this is completed we shall be able to put several men to break tin stuff and open on the three lodes reported on a fortnight since. Two men have also cleared two adit shafts, and have now commenced to clear another. At this point we can see a great deal of tin ground, which can be taken away at a profit to the company. We are progressing with the surface operations as fast as possible.—Pembro: The masons have fully completed the winze-engine and staid, and engineers are fixing this engine and also the pumping engine, some work for which we received from the foundry yesterday, and we hope in the coming month this engine will go to work. The capstan has been fixed and also the holdback-bob. The shaftmen have fixed pumps at surface from shaft to pond for condensing purposes, and are now preparing the drop-lift to drop below the adit level. All other surface operations are being pushed forward.—Addenda: In the north part of Sydney Goldolphin portion of the set we have four good tin lodes, from which thousands of tons of tin stuff can be raised above the pit level, and after the adit level is fully cleared very large quantities can be raised above this point for some years, and we feel assured with good stamping power large returns can be made at about 13s. 4d. in 1½ ft.—say, put up 48 heads of stamps.

MOUNT CARBIS.—W. Tregav, G. Johns, March 30: The sumpers are this week fixing standing-lift at the 35, where we purpose taking up the top water in a cistern to facilitate the sinking. The lode in the 33 east is worth 35s. per fm. The lode in the 33 west is worth 35s. per fathom. The lode in the 27 west is worth 10s. per fathom. All other points are without any particular change to report.

MOSTYN CONSOLS.—J. Woolcock, March 29: We have not yet reached the wall of the lode in the cross-cut from Furness shaft, but from the dips of the beds and a little water coming from the forebrest I think we cannot be far off. Since my last of the 15th our east level from engine-shaft has improved for ore; we have a strong masterly lode and well defined. During last week our mine was inspected by a practical mining engineer—Mr. J. J. Williams—who knows the district well, and he expressed himself highly pleased with what he has seen in the mine and said the shareholders should feel proud to be in possession of such a valuable property. West level from engine-shaft is also yielding good stuff for dressing-floors. I will now repeat what I said in my last report—sink the engine-shaft (say) 20 yards deeper, so that we may have a deeper level. **MYNYDD-GORDDU.**—Thos. Kemp, March 29: The 46 west of cross-cut has since last report crossed a branch of calcifer and quartz about 2 ft. wide, carrying a mixture of lead ore dipping west about 2 ft. 6 in. in 6 ft., which, we think, will prove to be the counter lode; this branch is letting out a strong flow of water, which in all probability comes from a branch of ore gone down in the level above (the 34) standing on the north side of the main lode. This we shall prove by cross-cutting as soon as the level is sufficiently advanced; the lode in the forebrest is composed of kilaas and calcifer, carrying a little ore in ground more favourable for opening. I hope soon to have the pleasure of reporting that this level has entered the bunch of ore gone down in No. 2 stope. All other bargains throughout the mine are without any material change worthy of remark since last reported. Saturday next being our bi-monthly settings, a full report will be sent next week. We forwarded on Saturday last 10 tons of grey lead ore to Messrs. Goodhart and Co., and another 10 tons will be got ready at the earliest date possible.

NEW HOLMBUSH.—H. Bennett, March 29: In driving the 120 west, on the Flapjack lode, we have cut into the old workings on the lead lode. We have now six men engaged in clearing and securing the old workings south, so as to reach the end at this level. In taking down the eastern side of the lode led standing by the old workers we find some very good stones of lead. We expect to reach the end in the next 7 or 8 fathoms, when we shall continue the lode south towards Redmoor with all possible speed, and expect to open a very good piece of ground for lead ore. We shall also as soon as possible put up the lode from the 120 to the 100, on the lead lode, under the point where the old workers had a good bunch of lead. We have six men cutting down the diagonal shaft below the 100, and good progress is being made. The top 100 fm. level to drive east on Flapjack lode, by six men; we are daily expecting to cut into the same course of arsenical munda that we have in the winze sinking below the 70. A winze in the bottom of the 70, on the Flapjack lode, sinking by six men, will yield good arsenical munda; when this winze is communicated with the 100 it will open up a piece of valuable ground for stopping. In the 70 east, on the Flapjack lode, we have commenced to work the rock-drills. We have opened the level the proper size for the machine, and the men are making fair progress in driving. We hope soon to meet with good results at this point.—Stopping: A stope in the back of the 120, on the Flapjack lode, by six men, lode yielding a fair quantity of arsenical munda and copper ore. We have ten stopes from the bottom of the 110 to the 60, on the Flapjack lode, worked by 59 men, yielding good arsenical munda and a little copper ore. We have seven stopes from the back of the 80 to the 35, on the Flapjack lode, worked by 59 men, lode yielding rich arsenical munda and a little copper ore. We are clearing the top 100 west, on the Flapjack lode, in order to reach the lead lode, where we expect to find the lode productive for lead, as it appears by the old workings section of the mine that large quantities of lead were raised between the 120 and the 110 and 100.

NEW KITT.—William Vivian, March 30: The shaftmen have cut a pit at the 36 fm. level, and are now driving north at this level to intersect the top lode, where we have about 5 fms. to drive. No change to notice in any other point of operation since my last report.

NEW WEST CARADON.—N. Richards, March 30: There is no change to notice in the 38 cross-cut driving south of Hallett's shaft. The driveage east by the side of the lode, consequently there is no change to notice at this point. The lode in the rise in the back of the 42 is improved, now yielding about 1½ ton of copper ore per fathom.

NORTH BUSY.—John James, March 30: The engine-shaft is down nearly 11 fms.; the ground is a little harder. We have not quite such good progress as I expected. The lode in the 18 east has been large; in the present end, however, it is rather smaller, now 2 ft. wide, letting out water freely, producing a little tin, but not to value. It has a very kindly appearance, and the testings of the lode in the level has changed, the same as it did in the 10 a few fathoms before we had the good lode for tin. There is no alteration in the stope south of back of winze in bottom of the 10. The ground in the 12 cross-cut of some more congenial for mineral, and we seem to be nearly a branch of ore gone down in the Old Mine. We have cleared and secured the ground for its entire length, and find a large quantity of ground taken away in the back and bottom of this level. Just behind the present end east the lode is 2½ ft. wide, composed of arsenical munda, copper, and tin. I have taken the men out of the winze sinking below this level and put them to stop the back, so that we might have a pit of tin stuff at surface for your inspection to-day. Since we have commenced to stop the lode has improved, now producing some good stones of tin. This is a very important feature, as the ground is all whole to the 15, which gives us 19 fms. of back in the angle of the lode, and as some of the best bunches of tin seen in the mine has been found between the 15 and 50. I purpose driving this end and stop the back that we may get a little tin stuff, and at the same time prove the lode.

worth 94. per fathom.—King's Shaft: The 160 end east is worth 94. per fathom. The 150 end east is worth 102. per fathom. The 140 end east is worth 102. per fathom. The 130 end east is worth 102. per fathom. The 120 end east is worth 102. per fathom. The 110 end east is worth 102. per fathom. The 100 end east is worth 102. per fathom. The 90 end east is worth 102. per fathom. The 80 end east is worth 102. per fathom. The 70 end east is worth 102. per fathom. The 60 end east is worth 102. per fathom. The 50 end east is worth 102. per fathom. The 40 end east is worth 102. per fathom. The 30 end east is worth 102. per fathom. The 20 end east is worth 102. per fathom. The 10 end east is worth 102. per fathom. The 0 end east is worth 102. per fathom. All the machinery on the mine is working well.

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The Mining Market: Prices of Metals, Ores, &c

METAL MARKET—LONDON, MARCH 31, 1882.

IRON.	£ s. d.	£ s. d.	TIN.	£ s. d.	£ s. d.
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TO INVESTORS.

THE

RICO SILVER MINING COMPANY
OF COLORADO

Has made substantial progress during the past year. It is engaged in a plain, carefully-managed, business-like Mining Enterprise, affording the opportunity for really immense dividends.

The shares already issued are held principally in London, Manchester, and Chicago.

I shall be very pleased to send this year's prospectus of the company, upon receipt of request therefore.

J. J. WEST, President.

245, Wabash Avenue, Chicago, U.S.

Notices to Correspondents

* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt; it then forms an accumulating useful work of reference.

GOOD FRIDAY.—Mine agents and other correspondents will oblige by sending their reports and correspondence a day earlier next week, in order that they may not be delayed or omitted through the occurrence of Good Friday.

MONTE ALBO MINING COMPANY.—Can any correspondent give any particulars concerning this company, in which I had shares allotted to me in May, 1870. The following year it was said that the concern would be thrown into Chancery, and I have heard nothing of it since.—A. M.

WIRE TRAMWAYS.—Can any correspondent give the names of two or three wire tramway makers, either in England or on the Continent. The tramway is to be used for carrying ore from copper mines to smelting works, and it is conveyed in the air.—F. U. G.

CHILE GOLD.—"R. F. G." (Bonchac).—The number of shares was stated in the prospectus. When purchasers buy first, enquire afterwards, the result is usually disappointing.

KILLFIRETH.—"O. S." (Bristol).—The notice being a share-jobbing advertisement can only appear in the advertisement columns.

Received.—"C. M." (Guernsey).—"J. H. B." (Boston).—"J. M. C."—"Pro Bono Publico" (Oregon Gold).—"J. R." (Mineral Riches of Siberia). Next week—"E. R. W."—"Subscriber" (Denver).—"H. M. C." (Colorado).—"Old Reader" (Richmond).—"T. W."—Our Correspondent's letter from Kimberley (March 2) will appear in next week's Journal.

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, APRIL 1, 1882.

THE MANUFACTURE OF BESSEMER STEEL.
THE ERIMUS WORKS.

The returns for the last year show that the greatest increase in the production of Bessemer ingots and rails took place in the Cleveland district, which promises before long to take the leading position in the kingdom as regards the make of steel by the Bessemer process. Up to a few months since the largest converters in use were those at the works of Sir J. BROWN and Co. (Limited), in Sheffield, and these were 10 tons each, but now Bolckow, Vaughan, and Co. have introduced two of the great capacity of 15 tons each. Mild steel of almost any quality can now be produced in the Bessemer converter, and it is fast displacing iron for many purposes, including shipbuilding, for not only is there more storage room in a steam vessel built of steel than one of iron, but there is also the further advantage of drawing from 4 to 5 ft. less water. Dr. SIEMENS holds that for purposes where boldness and grandeur of outline are essential no material can rival steel. If the object is simply to get tensile strength, as is the case in the chains of a suspension bridge, the use of steel wire enables us to attain a limit of strength exceeding 100 tons per square inch, or as much as five times the tensile strength of wrought iron. Steel is now made of such toughness that if a bar 8 in. in length is subjected to increasing strains it will stretch to 10 in. before giving way. The Bessemer process, however, has undergone considerable modifications since it was first brought out, still the direct chemical action of the atmospheric air on the metal in its fused state is the means by which the pig is converted into steel. By this process the percentage of sulphur is not greatly reduced, whilst the carbon and silicon are nearly burnt out in course of conversion. The Cumberland hematite is particularly well adapted for steel making, as it does not contain much phosphorus or sulphur. In the early part of the work Mr. BESSEMER tried to force air or steam into the molten pig-iron until the mass had obtained the malleability, as well as the properties of steel. To accomplish this the blast was sent from the top of the converter by passing a tube towards the bottom of the vessel. But now another and better means has been adopted, for the blast is introduced by a number of tuyeres through the bottom of the converter, the air passing upwards through the molten metal.

The converter itself is a large circular iron vessel constructed of iron plates rivetted together, and lined inside with from 10 to 12 in. of a highly refractory material. The top of the converter is circular, with a mouth inclining over at an angle of about 30° to the body of the vessel, so that the flame and sparks are sent in an opposite direction to where the workmen are stationed, as well as from the casting pit, the position of the mouth also preventing the charge of molten metal from being blown out. When the converter is swung into a horizontal position the molten iron can be run in without touching the holes with which each of the tuyeres is perforated, and when the requisite quantity has been produced the air blast is turned on, and the vessel is swung into a vertical position. The flame at the mouth of the converter shows the progress of the operation, for, first of all, only a small amount of flame appears, whilst myriads of sparks are showered out; then masses of slag are sent out, thus showing that the silicon is being oxidised. The flame gradually increases as the combustion of the carbon proceeds, until a vast white flame, apparently pure, roars up the chimney, against which the mouth of the converter is directed. The flame continues in full force until such time as the carbon exhausts and then gradually decreases, when the vessel is turned back into a horizontal position, when a certain quantity of speiseisen, separately melted in an adjoining cupola, is run into it. The admixture being thoroughly made in the converter by blowing through it for a few seconds, the metal is then ready for being ladled into moulds, the great heat remaining to keep the metal sufficiently fluid for the purpose.

The Erimus Works, in the Middlesborough district, is now taking a high position in the manufacture of steel rails and other material, there being a fine plant of the best construction, whilst there is the advantage of proximity to a good shipping port. The works were first laid out for the purpose of carrying on the Dank process, which a few years ago caused such interest amongst ironmasters. In some instances it done well, and in others just the reverse. The quality of iron turned out by the rotary puddler was found to be much superior to that turned out by the ordinary mode of puddling, and there was very little variation. The puddler appeared to be particularly well adapted for the rolling of plates, but the fact that iron rails have not been thought of for the last two or three years, put the Dank process on one side at the Erimus Works, and a steel plant took its place, and this we believe has some specialities worth noticing. There are two converters with wrought-iron shells 8 ft. in diameter outside, and 4 in. thick, the length from the centre of the trunnion to the top of the nose 8 feet 8 in., and to the bottom, exclusive of the blast box, 5 ft. 10 in.

The shells are carried by a strong cast-iron belt 3 ft. deep, a portion of which is used for the conveying of the blast, whilst the trunnions are 19 in. in diameter, and are cast on the belts, which are made in segments and fitted to the converter between strong angle-iron rings, so that it can be removed without damaging the shell of the converter, to which there is a cast-iron hood fixed on the back above the belt to form a tapping hole, so that should any phosphorus be taken up from the slag when poured in the ordinary way it can at once be tapped out. There is a hydraulic lift with a ram 14 in. in diameter, with a 21½ ft. stroke, the table being sufficiently strong for a locomotive to run over it, and the lift is worked by an ordinary slide valve, levers being placed both on the platform and the floor level, with a knock off arrangement at the bottom and top of the stroke. Speiseisen plays an important part in the production of steel, which we believe was introduced by Mr. MUSHET, who, finding it not easy to determine when the action of the air should be stopped, so that the quality of the steel was irregular, had the action of the air carried on until the carbon was completely removed, and then added sufficient carbon and manganese by means of molten speiseisen (an alloy of iron and manganese containing about 5 per cent. of carbon).

At the Erimus Works the speigel cupolas are 4 ft. 4 in. in diameter inside the shell, and are placed on the platform one on each side of the lift, and the speigel itself when required is run into small ladles, and is weighed when in the act of running from the cupolas by a patent machine suspended to the jib. The tipping gear is carried on brackets attached to the outer standards, which carry the converters, and consist of movable hydraulic cylinders, on which are fixed cast-steel racks working on steel pinions keyed on the trunnions. The piston rods are of Siemens' steel, bored out so as to conduct the pressure to each side of the pistons, the outer ends of the rods being secured to the standards, and the cylinders have sufficient traverse to turn the converters three-fourths of a revolution. Hand cranes are fixed on each side of the platform for lifting the blast box covers, and jack rams are provided for charging the bottoms. The whole of the appliances are specially well adapted for the converting process being carried out in the best and most economical manner, so far as labour is concerned at least. The engines are also all that can be desired, the steam cylinders of the hydraulic engines being 18 in. diameter and 30 in. stroke, the piston rods passing through the backs of the cylinders to work the double action pumps, which are placed directly behind them. The vertical compound blowing engines have steam cylinders 42 in. and 78 in. diameter, with air cylinders 54 in. diameter and 5 ft. stroke. The blast for the cupola is obtained from several of Root's blowers, and there are eight boilers for supplying the steam for the Bessemer machinery. The quality of the steel produced at the works cannot be excelled, being most uniform in character, and of course particularly well adapted for rolling into rails. Seeing that the North of England, from its favourable geographical position with shipping ports close at hand, must absorb a large portion of the steel rail trade of this country, there is no doubt but that the Erimus Company will have a fair share of it, and in so doing will maintain the superiority of English rail manufacturers.

THE COPPER TRADE.

During the quarter ending March 31, 1882, the quantity of copper ore, the produce of Cornwall and Devonshire, sold at the Cornish Ticketing, was 10,005 tons, which contained 595 tons 8 cwt. of fine copper, and realised 32,660l. 17s. 0d., being equal to an average of 3l. 5s. 4d. per ton of ore, and 54l. 16s. 4d. per ton of copper in the ore. During the same period the British, colonial, and foreign ores sold at Swansea amounted to 970 tons, which contained 91 tons 19 cwt. of fine copper, and realised 5876l. 5s., being equal to an average of 6l. 1s. 2d. per ton of ore, and 64l. per ton of copper in the ore. The average produce of the ore sold at Cornish Ticketings was 6 per cent., whilst that sold at Swansea gave an average produce of 9½ per cent. From this it will be seen that the aggregate sales by ticket were 10,975 tons of ore, containing 687 tons 7 cwt. of fine copper, realising 38,537l. 2s. The subjoined is a summary of the periodical sales at the Cornish and Swansea Ticketings respectively. The ores sold at the Cornish Ticketings were—

Date.	Standard.	Prod.	Price.	Per unit.	Tons.	Fine cop.	Amount.
Jan. 5.	105	19	0	5½	961	54t. 7c.	£ 3,114 17 0
19.	102	8	0	6¼	313	6	8,194 8 6
Feb. 2.	95	19	0	7	319	6	3,641 18 0
23.	101	12	0	5½	217	6	7,577 10 6
Mar. 2.	99	18	0	5½	213	0	2,485 16 6
23.	100	4	0	6	34	6	7,646 6 6
Total for the quarter					10,005	595 8	32,660 17 0
Quarter ending December, 1881					10,212	659 3	36,745 11 6
Quarter ending September, 1881					9,846	679 8	34,499 2 0
Quarter ending June, 1881					9,455	602 15	29,798 16 0
Total for the year 1881					39,513	2,536 14	£133,704 6 6
Showing a quarterly average of					9,879	634 3	33,426 1 7
Corresponding quarter, March, 1881					9,870	641 16	35,089 19 0

The ores sold at the Swansea Ticketings were—									
Date.	Standard.	Prod.	Price.	Per unit.	Tons.	Fine cop.	Amount.		
Jan. 17.	£88 8 s.	5 ½	9 ½	£6 12 s.	970	91 t. 19 c.	£ 5,876 5 0		
Total for the quarter.....					970	91 19	£ 5,876 5 0		
Quarter ending December, 1881.....					2,012	225 6	14,055 6 6		
Quarter ending September, 1881.....					5,345	440 2	24,130 12 0		
Quarter ending June, 1881.....					6,641	552 16	31,903 12 0		
Total for the year 1881.....					14,968	1,320 3	£75,055 15 6		
Showing a quarterly average of.....					3,742	330 1	18,766 9 0		
Corresponding quarter, March, 1881.....					5,719	445 14	26,329 19 0		

THE MECHANICAL VENTILATION OF MINES.

Just now the question as to the best system of ventilating our mines is being freely discussed in several districts, and the subject is one that certainly cannot receive too much attention. One of the difficulties, however, that has to be encountered with respect to the various mechanical appliances that have been invented for ventilating mines is the actual amount of useful effect that is obtained from them, for the figures given by some persons who had watched carefully the work done by certain fans, for instance, did not agree with that of others who were equally desirous of coming to an accurate conclusion. So far as regards fans, the Waddle, the Guibal, Byram, Brunton, and Schiele had all done good work, as have some of the revolving wheels, such as Cooke's and Lemelle's. The subject was rather exhaustively noticed by Mr. PERCY a few days ago near Wigan, but he gave no preference for one system over another. In the North of England the different modes of ventilating mines have been frequently discussed, resulting in considerable divergence of opinion amongst the ablest mining engineers as to the actual effect obtained, and this undoubtedly is the really important point that has to be mastered, if such is possible. A good deal has been said in favour of revolving wheels, more especially Cook's, which sweeps out a certain quantity of air at every revolution; but the balance of opinion appears to be in favour of fans working on the centrifugal principle. The Guibal and the Waddle fans could be made any size up to 50 ft. diameter, whilst the equally well-known Schiele fan was a small one, seldom exceeding 15 or 16 ft. in diameter. The Guibal and Waddle worked somewhat slowly, the engine being connected direct, whilst the Schiele worked quickly, power being communicated from a large pulley on the engine-shaft by means of a strap to a small pulley on the fan shaft. Both these fans have given satisfactory results, the Schiele (the smallest) having given as much as 250,000 cubic feet of air per minute when required. For Cook's ventilator it is claimed that under certain conditions 250,000 cubic feet of air can be obtained with one having a drum 20 ft. in diameter by 20 ft. long in round numbers at any reasonable water gauge.

Mr. MORRISON, who we believe is interested in the Guibal fan, stated at a meeting of the North of England Engineers, that the fan alluded to had been put up at places where neither the Cooke, Lemelle, nor any other displacement machine, as at present constructed, would be of the slightest service, and that he was certain that were an investigation made by a committee or by independent persons, and the first cost and duty taken into account, the result would be found to be largely in favour of the centrifugal system.

Then as to the difference in measuring the useful effect of different machines, it was stated that a gentleman of experience ascribed to the Fabry fan a useful effect of from 60 to 69 per cent., whilst another gentleman said he had found it to be only 35 per cent. M. Guibal claimed 75 per cent. of useful effect for one of his fans, whilst some specialists who tried and tested it said it was not over 50 per cent. Again, the Schiele fan at one mine was reported to have given 62 per cent. of useful effect, whilst a gentleman reported that it only gave about one-half of the quantity named. M. LEMELLE, in a printed paper, claimed to have realised 90 per cent., whereas on the other hand a mining engineer only gave him 35-50 per cent. These are great discrepancies indeed, and show that the fan doctors differ most seriously. An eminent gentleman also stated that he had made experiments solely with the view of trying to ascertain which was the best fan, and that although he had made a great number of experiments with different fans he had never found a Guibal which had given results equal to Cooke's. This is a view, however, that is not widely entertained. Then it has been suggested that several small fans might be found to give more effect than one large one. At the Bickerstaffs Colliery, near Wigan, it appears there were four small fans working over the top of a drift, and drawing air through a small opening in the roof. When the fans were put up only two were fixed, and they got 100,000 cubic feet of air per minute, with a water-gauge of eight-tenths. Afterwards when two more fans were put up they got 170,000 cubic feet of air per minute, with 1½ inch water-gauge. These different statements show how difficult it is to come to a conclusion as to the best system of ventilation that can be adopted. We do know, however, that both the Guibal and the Schiele fans have given good results, and we have seen them in operation at several places, and the opinion of most of our mining engineers is undoubtedly in favour of fans working on the centrifugal principle. We certainly agree with the views of Mr. PERCY in favour of the principle that the blades of fans should be inclined backwards and curved backwards, and that the fan should discharge freely all round the circumference, or have a complete spiral casing opening out to an enlarging chimney, and that the upcast or fan shaft should be used for winding, to allow of convenience of loading or unloading the cages without allowing a rush of air into the fan shaft. The question as to the best fan under certain conditions is growing in importance, and is now receiving an amount of practical and scientific attention that has not been previously paid to it.

THE COLLIERY INSPECTORS' REPORTS FOR 1881.

The issue of the colliery inspectors' reports as to the number of accidents which have occurred in the collieries and other mines of the kingdom for the past year once more brings the dangerous avocation of the miner prominently before the public. It is a salutary sign of the times to witness the growing interest manifested by the public in the welfare of the collier, and to feel that the statistics as to the number of accidents and deaths amongst them are not now, as formerly, merely scanned by those engaged in mining operations, but that they are attentively criticised by all classes. A wholesome interest once evoked in favour of the collier, and practical legislation by experienced men will be demanded, and the best results both to proprietor and working collier ensue. We have had amateur legislation enough in all conscience, until at length the colliery manager finds himself hedged in with rules and regulations, which if not absolutely impractical are exceedingly intricate and difficult of attainment, and which have failed in securing the object in view. Of one thing all must be painfully aware, and that is, that whatever rules and regulations are made, and however stringently they are carried out, accidents must and will occur. All that can be done is to insist that the safety of the collier be the first desideratum. Every other consideration must be made subservient to that, and it is gratifying to know and be able to state, without fear of contradiction, that such is now the case in all properly conducted mining operations. We protest against the insinuation which is occasionally made to the effect that colliery proprietors are indifferent to the safety or welfare of their men. The munificence in case of accident, and the provisions made for the education and moral elevation of the men, are sufficient proof that colliery proprietors generally are quite alive to their responsibilities, and by no means tardy in carrying them into practical effect. An accident in a colliery is by far the most expensive contingency which can possibly happen to the proprietor, so that putting aside every humanitarian consideration, and dealing with it upon mere sordid interests, it is every way to the advantage of proprietors to work their mines with the smallest possible loss of life and accidents generally.

The statistics for the past year show that although there was an increase in the number of accidents there was a material decrease in the number of lives sacrificed. The total number of fatal accidents was 929, and the total number of deaths occasioned thereby 1053, showing an increase as compared with the previous year of 32 fatal accidents, and a decrease of 349 in the number of lives lost. During the past twelve months there were 495,477 persons employed in and about the mines under the Coal Mines Act; there were 154,184,300 tons of coal raised, 1,896,907 tons of fire-clay; 11,858,766 tons of ironstone, and 1,019,958 tons of shale. Thus there was one death by accident amongst every 587 persons employed, and one death by accident for every 519 persons employed. For every fatal accident there were 200,189 tons of minerals raised, and 177,106 tons raised for every death.

Deplorable as is this loss of life, and fully admitting the fact that many of these deaths are attributable to what may be termed "preventable" accidents, we cannot regard the number of casualties or the loss of life as extravagant, having regard, of course, to the exceedingly dangerous avocation of the collier in "the bowels of the earth," the large number of persons employed, and the enormous aggregate of minerals brought to bank. Explosions of fire-damp took the lead in the list of casualties, 31 having occurred involving the loss of 116 lives. This, however, is a most gratifying decrease as compared with the loss of life from the same cause during the previous year, when no less than 499 lives were sacrificed by 28 explosions. We have continually contended in these columns that no amount of mere ventilation will prevent explosions, and opinion is rapidly growing amongst practical and scientific men that far more attention should be paid to the production of a really safe "safety lamp" than ventilating shafts and fans.

Of course, we would not discourage for an instant any efforts for the better ventilation of every heading or working place in a mine, but practical men know how exceedingly difficult of attainment such to be, whereas if a safety lamp could be invented which would *bona fide* bear the test of a sudden blower of gas the difficulty of the manager would be decreased almost to a minimum, and the pits robbed of much of its present terrors. The number of so-called safety lamps is legion, but how few can be depended upon, or, in fact, how many inventors of the lamps, which they so strongly recommend, would be willing to risk their own lives by working in dangerous fiery seams with their own lamps. The mining world sadly wants a lamp which can be depended upon in every contingency which can arise—one which, whilst giving sufficient light to the men, would be proof against a sudden blower of gas, and defy the efforts of the collier to unlock, or would be extinguished in the attempt. If such a boon could be achieved, then its use in every mine ought to be rigidly enforced by Government—no other permit to be used. In the absence of such lamp explosions will occur, involving large sacrifice of life, no matter how careful the management or what the amount of ventilation. With sudden blowers of gas and defective lamps, we can never expect a perfect immunity from explosions unless, indeed, the electric light becomes feasible for the illumination of our mines—a contingency far nearer of practical solution than some persons seem inclined to admit. If in addition to the adoption of a really safe safety lamp, shot firing and the use of gunpowder in mines were strictly prohibited, under any and every circumstance, there would soon be a most sensible diminution in the number of explosions and an appreciable decrease in the loss of life.

Falls of roof occasioned as usual a large number of deaths, and this is the more to be regretted simply because were ordinary precaution on the part of the colliers themselves would, in the great

majority of instances, have prevented the fatality. The evidence adduced at the coroner's enquiries have over and over again shown that an abundance of timber was within the reach of the collier, but with a recklessness which seems inherent in his calling he neglected to avail himself of the means of safety at his disposal, and thus paid the inevitable but too dearly purchased penalty. When will colliers learn practical lessons and personally endeavour to minimise the risks associated with their dangerous avocation? The reports of the various inspectors now under review show that the number of deaths during the past year is precisely the average for the past eight years, and having regard to the greatly increased quantity of coal raised during the past year, the returns are so far satisfactory. We are sure, however, all engaged in the vastly important yet dangerous avocation of mining will still endeavour to render the calling of the collier as free as possible from all risks of accident, and that no mere mercenary consideration will induce even a desire to escape from his just responsibilities.

IMPROVED EXPLOSIVE COMPOUND.

To provide chiefly for employment in blasting operations, a high explosive, the ingredients of which can be separately manufactured, handled, and transported, and can be mechanically united when required for use by the consumer, whereby the danger usually attending the manufacture, handling, and transportation of ordinary high explosives is avoided, is the object of the invention of Mr. S. R. DIVINE, of Loch Sheldrake, New York. He proposes an explosive compound composed of two ingredients, the one a solid, such as crushed or powdered chlorate of potash, and the other a liquid, such as nitrate of benzole, which are combined to form a high explosive by merely causing the mass of the solid ingredient to absorb the liquid ingredient, a combination which can be effected by the consumer at the time when and at the place where the explosive is to be used. These ingredients being in themselves incapable of being exploded by percussion, can be with safety separately manufactured, handled, and transported to the consumer, who will have no difficulty in effecting their combination, because the operation of combining them is of so simple a character. Either perchlorate or permanganate of potash may be used as the solid ingredient of his improved explosive, and other liquid nitro-compounds may be substituted for the nitro-benzole, the essential condition being observed that the liquid ingredient substituted shall possess a degree of fluidity which shall adapt it to be readily absorbed by the solid ingredient, so that the final act of preparing the explosive for use may be performed by merely bringing the two ingredients into juxtaposition, and allowing the liquid ingredient to be absorbed by the solid ingredient.

In manufacturing the nitro-benzole he uses the naphtha of commerce, and it will therefore be understood that such nitro-benzole contains some nitro-toluol and picric acid. Four and one sixth parts of chlorate of potash to one part of nitro-benzole are considered to constitute the theoretical proportions in which the ingredients of the compound combine most effectively; but in order to somewhat diminish the sensitiveness of the compound to ignition by percussion, he prefers to use from three to not exceeding four parts of chlorate of potash to one part of nitro-benzole. It will be understood that the ingredients of the improved explosive may, if desired, be mixed in measured proportions and in any convenient vessel. Owing to the viscous condition assumed by this explosive compound when the ingredients are united, it is not liable to be accidentally exploded by tamping in the act of charging the drill hole, and in this respect possesses an important advantage, greatly contributing to safety in its employment.

The same gentleman has also patented an invention the object of which is to facilitate the use of high explosives in blasting operations. To this end he employs a blasting compound composed of two inexpensive ingredients, the one a solid and the other a liquid, the solid being capable of absorbing the liquid, and the result of such absorption being the conversion of the two ingredients of the compound into a high explosive. He constructs cartridge shells or envelopes preferably of muslin, cloth, paper, or other porous material, and of the shapes and sizes of ordinary blasting cartridges, and he fills such shells with the solid ingredient of the explosive, and provides the liquid ingredient in a separate vessel suitable for transportation, so that finally when the cartridge is required for use the consumer effects the necessary combination of the ingredients by causing the solid ingredient to absorb the liquid ingredient either by immersing the cartridge shell in the liquid ingredient, or by opening one end of the cartridge, and slowly pouring the liquid ingredient upon the solid ingredient contained in the cartridge shell.

It will thus be seen that the improved cartridge shell is prepared for transportation by being charged with a solid ingredient, which by reason of its not being explosive can be safely handled and transported, the completion of the charge being effected by the consumer at the time when the cartridge is required for use, such completion consisting merely in the addition of the required quantity of the liquid ingredient to the said solid ingredient. By means of the porous cartridge envelope the relative proportions of the ingredients of the compound may be conveniently fixed with suitable accuracy by first allowing the solid ingredient to become fully saturated with the liquid ingredient and then squeezing or wringing out the cartridge by hand. As soon as the ingredients are mechanically united by the absorption of the liquid ingredient by the solid ingredient in the desired proportions, the cartridge is ready for use, and may if desired be at once inserted in the drill hole and exploded by percussion. As nitro-benzole is not miscible with water, the solid ingredient and the porous cartridge envelope by the absorption of nitro-benzole become water repellent, and the cartridge is thus especially adapted for blasting in water.

THE COMSTOCK INUNDATION.

Referring to the source of the Gold Hill waterflow, the Virginia (Nevada) Chronicle states that on Feb. 12 the north drift on the 2800 level of the Exchequer (Nevada) Mine encountered a large body of hot water. The waterflow, in excess of the water which was then being pumped from the mine, has been variously estimated as being from 100 to 120 miner's inches in volume. Taking the latter figures as more nearly correct, the flow is equal to 1500 gallons a minute, or 90,000 an hour—no insignificant stream in itself. This water has since shown no abatement, and has so far exceeded the capacity of the pumps in that locality that it has risen in the Jacket shaft to a present point between 2500 and 2600 levels, and has flowed from the Yellow Jacket to the 2560 level of the Belcher, and thence to the 2275 level of the Overman, suspending prospecting operations in the Exchequer, Alpha, Con. Imperial, Yellow Jacket, Belcher, Crown Point, and Overman Mines. Notwithstanding Jacket's considerable pumping capacity (100 miner's inches for 24 hours), the water has gained steadily, although it is now believed that it will soon be under control. When the body of water was first struck in Exchequer nine days ago it was suggested that, inadvertently, the west wall had been cut, either with a diamond drill hole or by the drift. Subsequent enquiries, however, revealed the fact that no drill hole or drift in the Exchequer had been run within 200 ft. of the west wall. It has been further ascertained that a large body of quartz was encountered lying to the east of the regular footwall in an almost vertical position, and probably rising several hundred feet above the 2800 level. Its existence in the Bullion and adjacent mines has long been suspected, and the fear of water alone has prevented prospecting along its supposed direction. The action of the water in the Yellow Jacket Mine indicates that the bottom, or at least the lower portion of this quartz body, has been encountered.

Ore bodies on the Comstock have mostly occurred in such outlying branch fissures. Many will remember the flow encountered in sinking the Consolidated Virginia shaft, which flooded the Latrobe tunnel for months. It is also fresh in the memory of Comstock miners that bodies of water were struck while developing the 1300, 1400, and 1500 levels of the Consolidated Virginia and California Mines. It is a fact beyond dispute that with depth the Comstock ore bodies have increased in size and richness as their occurrence has been less frequent. From the surface to the 4000 level 11 bodies of ore

were encountered, yielding a net profit of \$22,000,000. From the 1000 level to the 2000 level three bodies of ore were found, yielding about \$100,000,000 net profit. With the increased size and richness of ore bodies an increase must also exist in the generative medium. Water being the medium acknowledged to have formed ore, its increased quantity must point to an increased size of ore bodies. It is possible that only one ore body will be found between the 2000 and 3000 levels of paying qualities, and it is quite possible that its first appearance has been indicated by encountering such an immense body of water in the north part of the Exchequer Mine. The water encountered on the 2800 level will relieve the upper portion of the branch fissure, and that part above, after the water has found its level, will be dry. To demonstrate the existence of ore at this point a drift might be run from the lower levels of the Bullion Mine east to intersect this fissure, the lower workings of the Bullion not being flooded, and having no connection with any of the mines before mentioned. In the event of ore being encountered a consolidation of the other mines could easily be effected for the purpose of draining the lower levels of the Jacket through the Bullion's new shaft, by placing in that shaft pumps capable of handling this flow of water.

PRACTICAL GOLD MINING, AND ITS MANAGEMENT.

By THOMAS CORNISH, M.E. (late of Australia).

Author of "Gold Mining: its Results and its Requirements," "Our Gold Supply: its Effect on Finance, Trade, Commerce, and Industries," &c.

There is probably no industry that excites the speculative faculties of all classes as that which gold mining has done, and is still likely to do. In the earliest days of its discovery in California and Australia the news that gold could be washed from the surface soil or within a few feet of it, oftentimes in such quantities that men's fortunes (or piles) were made in a few weeks or months, led many thousands of energetic spirits of all nations to tempt fortune in searching for it. The most adventurous spirits found ample opportunity for expending their energies in the hazardous occupation of gold mining, whether as pioneers in the discovery and prospecting for new fields or in developing the established gold fields. The wild and visionary hopes of many of those who rushed off in haste to try their luck at gold digging were doomed to disappointment, and it was by the determined energy of those who were not to be daunted by a few failures or the loss of months and sometimes years of labour that succeeded in unearthing the enormous quantity of gold which has been distributed throughout the channels of trade and commerce during the last 30 years.

Gold mining is an industry, trade, or profession, the practical details of which can only be acquired by intelligent application and actual working and observation. Theoretical views, or the cursory glance of a gold field, or the inspection of one or two mines is not enough to qualify a man as an authority on gold mining; and it is a subject which is difficult to convey a correct idea of to the uninitiated, as there are so many incidents and phases which may be surmised, but cannot be proved except by actual development. There is no other industry in which money, time, and labour can be so quickly and irretrievably wasted as in that of gold mining, or in which it is found so many are ready to assume a knowledge of and profess to be authorities upon with little justification.

Since my arrival in London from Australia several millions of money have been subscribed for investment in gold mining companies established for the avowed object of gold mining in India and other places; but from the reports of the operations of many of these companies there appears to be but a small proportion of the capital spent in actual mining operations in developing the resources of the various properties; and, considering the excessive sums of money paid for the privilege of prospecting for gold (in most cases) on other people's property, and the extravagance in costs of organisation and management, there is, I fear, but little chance in many instances of the shareholders reaping any benefit.

The subject of mining management is one that can be best learnt by dearly bought experience, and the Australian gold fields have probably afforded the best opportunity for acquiring it, and those who have graduated through the various phases of practical gold mining on those gold fields, especially in Ballarat, should be and undoubtedly are possessed of an experience not easily acquired elsewhere. On this celebrated gold field there were from the earliest days till now many difficulties to overcome, and which were encountered with a determination on the part of the Ballarat miners unequalled in any other part of the world. A short description of the rise and progress of gold mining in Ballarat, where I resided for many years, and as one who took an active part in developing its resources, it may not be uninteresting to give some account of the process of the development of practical mining and its management on that celebrated gold field, and which will probably best convey to many of your readers the various phases of mining adventure.

The golden city of Ballarat has obtained a world-wide reputation, not only for the enormous production of gold within the district, but for the determined energy of its mining and business population in overcoming difficulties in mining undertakings not met with at that time in any other places. Gold was first discovered here in September, 1851, by Messrs. Hiscock and Esmond, whose prior experience in California led them to explore the quartz ranges near Ballarat, now known as the Golden Point and White Horse ranges, which resulted in their discovering alluvial gold in a gully, ever since named after Mr. Hiscock. The news of this discovery having been made known in Geelong and Melbourne soon caused a rush of enterprising gold seekers from those towns to follow the example set by those two pioneers, and the hills and gulleys around Ballarat soon became alive with a population of enthusiastic explorers searching for gold, armed with appliances only of the most crude description for obtaining the precious metal. As parties of men arrived on the New Eldorado they set to work in various places as their fancy dictated, and the first rich and may be said almost fabulous discoveries were found on the famous Golden Point, and which soon became the great centre of attraction. From thence soon radiated a series of rich discoveries in the gulleys and on the ranges for several miles round, including the famed Black Hill, Eureka, Canadian, Prince Regent, and many other localities that attracted a population fast and furious. The talismanic effect of the news of the gold discoveries in Victoria and New South Wales soon spread to England and other parts of the world, with the result of a speedy increase of population of eager gold seekers, such as was never seen before and probably will never be witnessed again, and the continued success of the early pioneers in gold digging laid the foundation of the enormous increase of population and the rapid development of the resources of these wonderful colonies.

[To be continued.]

WET EXTRACTION OF LEAD, SILVER, COPPER, NICKEL, AND COBALT.

The wet extraction of silver, lead, copper, nickel, and cobalt from their ores offers many difficulties, especially in presence of arsenic and antimony; the process, however, invented by Mr. ALEXIS DROUX, of Paris, not only allows the extraction of these metals, but produces them in a state of great purity and separates them when they or several of them are contained in the same ore. The invention may also be applied for extracting these metals from the residues of the mechanical treatment of lead ores. These residues, consisting of a fine powder, are too poor for being used in foundries, and they cannot be mechanically enriched without losing a considerable portion of their metallic contents. It will, therefore, be readily understood that an economical process for utilising these residues, by extracting the metals they contain, must be of the utmost importance for the working of mines. The new process consists in binding with chlorine, and at a low temperature, the metals contained in the ores and the mattes. When the ore contains lead it is treated hot with a solution of sea-salt and an acid in proportions varying according to the case. This operation is performed in wooden vessels provided with a double bottom, serving as a filter, on which the powdered ores are placed about 40 to 50 centimetres high, and then the dissolving liquid is let in through a leaden pipe, having previously been prepared in a reser-

voir placed on a higher level than the above vessel. When the treatment is to be effected at a high temperature the mixture of ore and liquid is heated by steam to a temperature of about 80° or 90° (centigrade) by means of special heating arrangements. When the ore contains neither lead nor silver the metals are extracted without the application of heat, and the arrangement of the vessels is very much simplified. The treatment of the ores and mattes by this new process consists of five distinct operations, which will be described *seriatim*.

The ores and mattes may be ground by any known apparatus so as to reduce them into fine powder. The ores must be roasted in certain cases if they contain copper, nickel, or cobalt, but always at a low temperature and in a strongly oxidising atmosphere. For the extraction of lead roasting is never needed, and thereby volatilisation completely avoided. The next operation consists in dissolving and fixing the metals. The composition of the liquid for fixing the metals by chlorine and for the dissolution of the formed chlorides depends on the nature of the ores. Generally the liquid contains 20 to 25 per cent. of salt, and 1 to 10 per cent. of acid. The dissolving liquids may be used again after precipitation. The precipitation of the metals may be effected cold or hot, according to the nature of the metals. The dissolution of lead must be effected hot, after which it will suffice to cool the liquid down, the silver having been previously removed. The chloride of lead produces small white crystals, which may be easily gathered. Copper is precipitated after cooling by means of metallic iron. If the ore contains nickel or cobalt he submits the solution, after removing the copper therefrom, to a current of chlorine for peroxidising the metal-salts; then he precipitates the iron by carbonate of lime. The nickel and cobalt are precipitated from the filtered liquid in the state of oxides by lime water, and then separated by one of the known processes. The use of chlorine for precipitating copper, nickel, and cobalt may be dispensed with by using an alkaline sulphide. The iron is removed very readily by submitting this mixture of sulphides to the action of hydrochloric acid diluted with much water, whereby chloride of iron is formed, which may be used like chloride of sodium for dissolving metals under the conditions above mentioned. The sulphides of nickel and cobalt are then roasted for obtaining pure oxides by driving the sulphur out. The precipitated metals must be washed very rapidly and with an abundance of water for removing the salts they may contain; then the metals are dried cold for avoiding oxidation; a hydraulic press or drying apparatus may be used. Silver is cast in crucibles, the other metals in a reverberatory furnace. The chloride of lead thus obtained generally contains 75 to 75 per cent. of metallic lead. It may be used in this state for manufacturing oxides or salts of lead; or the metal may be extracted by casting with coal and carbonate of lime. For preparing the dissolving bath hydrochloric acid or sulphuric acid may be used with the same results. The advantages of this process are very numerous. Besides the perfect purity of the products the amount of acid consumed is never greater than the amount corresponding to the law of chemical equivalents. Moreover the dissolving liquid can be used many times, and therefore the cost of extraction is very small.

THE YORKE PENINSULA COPPER MINES—SOUTH AUSTRALIA.—BY A VISITOR.

The Kurilla Mine, the property of an English company, is situated about two miles south of Kadina, and adjoins the Wallaroo sections. It is evident that ore-dressing by means of machinery has not been extensively resorted to here in the past, for on the surface, a short distance from the shafts, lie large quantities of the poorer veinstone, which have been put aside, awaiting the appliances necessary for the effective treatment of these low-class ores. The ore obtained here is similar to that found in the Wallaroo Mines, and the country met with in working the lodes is much the same. In parts of the mine I saw some really good ore being turned out, especially in one level, where the lode gave excellent returns. The first discovery of ore in this mine was made about 20 years ago. In 1874 the proprietor, the Yorke Peninsula Mining Company, raised in England about £8000, intending to expend it in trying that portion of the property lying to the westward of Hall's engine shaft—the main shaft of the mine—about 60 fms. from which a new engine shaft was commenced. This shaft (Grainger's) was intended to be the central point of the future workings, but a discovery of green ore 130 fms. east of Hall's shaft, and the almost simultaneous discovery of ore 30 fms. north of the first find, changed the plan of operations, the work in the western part of the mine ceasing with the sinking of Grainger's shaft to the 25, and attention being directed to the eastern ground, which has been worked ever since. Two distinct lodes, each having a parallel vein or loop, are now being explored—the Kurilla lode, with its south branch, and Morphet's lode, with its north branch. The direction of the lode is practically east and west, but subject to occasional bends both north and south. Morphet's lode (named after Sir John Morphet, one of the colonial committee of inspection of the Yorke Company), of which the green ore discovered in the year 1874 was the surface outcrop, lies about 25 fms. north of the Kurilla lode. The parallel veins of both lodes are being worked by cross drivages from the main workings. On the Kurilla lode is Hall's engine-shaft, at the time of my visit 67 fms. deep, and the 15, 25, 35, 45, 55, and 67 fm. levels are driven eastward on the course of the lode. By means of a Darlington rock-borer a cross-cut is being driven north towards Morphet's lode from the bottom of Hall's engine-shaft. Another borer is engaged in a cross-cut going south from the 67 to cut the south branch. Two stopes are being worked in the back of the 67, and one in the 55, both producing good ore. Tributaries are working on this lode at various parts, turning out fair ore and making wages. On Morphet's lode the engine-shaft is down 43 fms., and the 10, 20, 30, and 43 fm. levels driven east and west from it, the greater part of the driving being eastward. At the 55 a cross-cut has been driven from the Kurilla lode to Morphet's lode, and levels driven east and west of the cross-cut. A connection has been made between this cross-cut and Morphet's upper levels by a winze from the 43, through which the water is conveyed to Hall's shaft and pumped to the surface. This arrangement allows the entire drainage of the mine to be done by one engine, leaving the engine on Morphet's lode free to do the hauling. The level between the 55 drive east and west of the cross-cut and the 43 is being stopped away, the stopes yielding good ore. The 55 is still being driven east and west, a good lode being met with in the eastern level, but not so good in the western. The north branch or vein of this lode, as previously mentioned, has been tapped by cross-cuts, and a good deal of driving has been done eastward at the shallow levels, but only just touched at the 43 and 55 fm. levels. When the Devon Consols Mining Company was wound up about two years ago the proprietors of the Kurilla Mine purchased the southern portion of the sections held by the late company, which join the original Kurilla sections on the east. On them and about 50 fms. east of the boundary line the Devon Company put down an engine-shaft in a line with the Kurilla lode to the 20 fm. level, and did some driving east and west of it at the 10 and 20. Communication is now opened up between the Kurilla workings and those at the 10 and 15 fm. levels in the new sections, thus draining the Devon shafts to the 15. The 25 fm. level is already driven some fathoms across the boundary line, and is being pushed on towards the Devon workings, as are also the 35, 45, and 55 on the Kurilla lode, and the 55 on Morphet's lode. On the surface the company have since resumed in 1874 erected a good deal of machinery, including the engine on Morphet's lode for pumping and hauling, the crushing engine and crusher, jiggering machinery and engine to drive it, air compressing engine for driving boring machinery, an engine driving a lathe, joiner, &c., in the fitting shop, and other gear. Besides the two Darlington rock-borers now at work there is another on the mine, and awaiting erection are a stone-breaker, more jiggering machinery, the work for three Bortase's bidders, &c. When these appliances are added to those at present in use the treatment of ores hitherto put aside will contribute further to the productiveness of the mine, and better results will, of course, follow than have been possible with the limited ore saving machinery previously at work. To facilitate transit to the seaboard (Port Wallaroo, distant about 4½ miles from the mine) a line of rails connects the mine with the Wallaroo and Kadina tramway. The mine is looking exceedingly well, and is selling 300 tons of 16 per cent. ore per month. There is every probability of this output being considerably increased at no distant date, a discovery having been made quite recently near Gurner's shaft in one of the new sections of a rich vein of copper ore about 4 ft. thick. The visitors to the Kurilla will find in Capt. Anthony's possession a collection of mineral specimens which were much admired at the Melbourne Exhibition, and which will repay inspection.

In conclusion, I must not overlook the means of communication with the seaboard, the facilities for shipping, and the smelting works, all of which are important aids to the profitable disposal of the yield of the mines. The chief seaport (Port Wallaroo) of the mines is possessed of jetty accommodation not to be equalled in the colony; the tramways are being worked by the Government, who have also established rail communication between Adelaide and Wallaroo, the last few miles of the railway running parallel with the tramway from Kadina to Wallaroo; and all reasonable requirements of the population (in more prosperous times numbering over 20,000 souls) have been provided for. At Wallaroo, as at several other outposts, official blundering led to a waste of public money, but thanks to the persistence of the residents permanent ill consequences were avoided, for the works connected with the new jetty were suspended and not resumed until the mistakes made were rectified. This jetty has not long been out of the hands of the contractor, upon whom it reflects great credit, for it is believed to be thoroughly substantial work, and it is equal to all demands likely to be made upon it for many years, not only by the mines but also by agricultural districts, for the produce of which, by the construction of fresh lines of railway, Port Wallaroo has become the most convenient outlet. As I have already stated, the tramways are now in the hands of the Government, but for many years they were profitably worked by a private company. Sidings are laid down to all the mines now carrying on operations, so that the ore needs but little handling from the time it leaves the dressing-floors until it reaches the smelting works or the vessel's side. The railway between Kadina and Wallaroo is not much used by the mines, being of different gauge to the sidings, which, like the tramways, are of the same gauge, but when connecting lines are put down to the mines horse traction will largely give way to steam. To avoid the lengthy and roundabout

journey to Adelaide via Wallaroo, the Moonta people have fitfully agitated for the construction of a branch of the narrow gauge line from Kadina to Moonta; but since the ore from the mines in the vicinity of Moonta must continue to go to Wallaroo it is doubtful whether the Government will do more than provide steam communication with the latter place, and that, perhaps, only after a good deal of delay.

The SMELTING WORKS, which belong to the proprietors of the Wallaroo Mines, are very extensive, and are capable of dealing with immense quantities of ore, having numerous reducing, roasting, and refining furnaces. The yellow sulphureous ores are burnt in calcining kilns to drive off the sulphur before smelting. All the ores are reduced to regulus, which is run out and allowed to cool. The rough blocks of regulus are then submitted to a refining process, which completely separates all foreign matter from the pure metal. The copper is finally run into moulds, either cakes or ingots, and is then trimmed ready for shipment. The brand, "Wallaroo," is not omitted, for this brand commands a higher price in the home market than copper, which has not so good a name. The smelting works are well worthy of description in detail, but unfortunately I delayed my visit until time did not admit of more than a hasty inspection of them. They have every requisite for the effectual treatment of the ore obtained at the mines in the district, and are furnished with complete appliances for assay purposes. The sulphurous fumes and smoke from the furnaces pass through flues to a culvert communicating with an immense chimney-stack, in building which nearly 300,000 bricks were used. The works give employment to a large number of men, and keep colliers constantly trading between Newcastle and Wallaroo, the vessels bringing coal, and usually taking back low-class ores for treatment at the Wallaroo Smelting Company's Hunter River Smelting Works in New South Wales.—*South Australian Advertiser*, Feb. 18.

VAN MINES.—SPECIAL REPORT

March 30.—Having furnished a full report for the meeting last week, it will hardly be necessary for me to trouble you with a long report this week, there being no material change in any point at Van. In the cross-cut south, at the end of the 105 east, we have a very strong lode, but no mineral worth valuing. We are preparing for the deepening of Edward's shaft, and shall put a pair of men there in a day or two.—Van Hill: In the lower cross-cut we have driven 10 ft. The ground in the end looks encouraging, and lets out water freely. The ventilation is rather short, but I have arranged to place a water-blast, which will remedy this deficiency. The trial cross-cut on the western side of the hill is still in a strong sparry lode, showing good spots of lead and copper.

Surface: We are pushing on the farm work as fast as possible. Our four-weekly sale takes place to-day upon 200 tons of lead ore and 120 tons of blende. As under please find list of bargains for the ensuing two months: The 120 west to four men, at 80s. per fathom. The stripping of the lode to the full width at the No. 3 cross-cut in the 120 to four men, at 65s. per cubic fathom. The same at the 100, west of shaft, to six men, at 57s. 6d. The cross-cut south in the 105 east to four men, 120s. The 75 Permanent level east to four men, at 80s. per fathom. The 15 east to four men, at 75s. The two stops in the back of the 105 east to eight men in each, at 50s. and 52s. 6d. per fathom respectively. The western slope to six men, at 52s. 6d. The stops in the back of the 90 are set as follows:—The 20 to eight men, at 47s. 6d. The 40 to eight men, at 70s. The 60 to eight men, at 67s. 6d. The 80 to eight men, at 60s. The 140 to six men, at 52s. 6d. The stops in the back of the 75 are set as follows:—The 20 east to eight men, at 65s. The 20 west to eight men, at 50s. The 40 to eight men, at 47s. 6d. The 60 to eight men, at 50s. The 80 to eight men, at 50s. The 100 to eight men, at 50s. The 120 to eight men, at 50s. The 150 to six men, at 55s. The slope in the back of the 60 west is set to eight men, at 80s. per fathom. The stripping of the lode to full width in the eastern end of the 30 fathom slope in back of the 105 west is set to two men, at 80s. per fathom. The cross-cut in the lower level at Van Hill is set to six men, at 120s. per fathom. The trial on the western side is set to two men, at 75s. per fathom.—W. H. WILLIAMS.

THE PERRAN SILVER-LEAD CONSOLS.—SPECIAL REPORT.

Sir,—I am requested by the directors to enclose you a copy of the agent's report, received to-day, showing that substantial progress has been made in draining the two mines. The Penhale shaft is clear 72 fms. below adit—97 fms. from surface, and no difficulties are anticipated in reaching the bottom—110 fms. below adit—very shortly. The Phoenix shaft is clear 60 fms., at which point it requires repairs, but these are already well in hand, and the bottom, which is only 8 fms. deeper, may be reached early next week. Silver-lead ores are obtainable in considerable quantities at these levels, but the productiveness will undoubtedly increase as greater depths are attained; samples thereof have been assayed for silver by Messrs. Johnson, Matthey, and Co., assayers to the Bank of England, with the following highly satisfactory results:—From Penhale shaft, 60 fm. level: 27·45 ozs. of silver to the ton. From Phoenix shaft, 50 fm. level: 14·70 ozs. of silver to the ton. It is the intention of the directors to make a special inspection of the mines during the Easter holidays, leaving London on Thursday evening next, and to ascertain also the requirements for raising and dressing the ores. If you can make it convenient to meet them at the Red Lion Hotel, Truro, not later than 8·30 A.M. on Good Friday, April 7, and accompany them, you will doubtless be much pleased to see the extent and importance of these properties, which the directors are assured—and have every reason to believe—will not fail when fully developed to be a great success. A more detailed report will be issued after their return.

ROBERT MAKEPEACE, Secretary.
Redruth, March 29.
PENHALE.—The shaftmen are at present engaged in packing the plunger pole, and making new joint at the 70, which will be completed to-morrow morning. The water is 2 fms. below this level, and we shall commence draining again to-morrow. So far as we can judge at present the next plunger lift, which is to the 90, seems to work well; however, should the pole fail under water, we have a working barrel in this lift which will save dropping the long side lift, and we fully expect that this difficult, dangerous, and uncertain work is now at an end, and our progress to the bottom of the mine will now be much accelerated.
PHOENIX.—We have not finished clearing the run at the 60, but hope to do so by Tuesday next, and if there is no debris below this level, we shall be able to drain the water to the bottom in five or six hours after the present choke is cleared. We shall then commence sinking the shaft deeper by a full pair (force) of men, and as soon as we get under the lead-bearing gossan we are safe to have a rich and continuous course of silver-lead—such gossan as this is never known to fail. The winding engine has not arrived yet, and we are greatly in want of it. The two pumping engines continue to work well.

PRYOR AND SONS.

ALMADA AND TIRITO CONSOLIDATED SILVER MINING COMPANY.

J. H. Clemen, Jan. 20: The cross-cut in rise, about 30 ft. above tunnel, Mina Grande, shows in the breast more than half ore. Mr. Harris unites with me in thinking your reserves are all right for this year.
No. 3 furnace is beginning to work hot and fast, and I have left strict orders to make payments to Messrs. Bours and Son for account Melchers succeores, such sums to be thus ready for remittance to you.

H. Harris, Jan. 20: Furnace No. 3 was running three days ago, and in two or three weeks we expect a considerable increase in the bullion extraction.

GUJAS.—Jan. 23: 9 1-10th ft. were driven; price \$13·12; total 176 ft.; this cross-cut is much the same as in last fortnight as to class of rock; the men are making good progress in driving.

Feb. 18: Cross-cut for Gujas is 185 ft. from eastern rail; the breast is in a mixture of felspar and porphyry.

SAN JOSE CROSS-CUT.—Jan. 28: 7 ft. at \$12. This cross-cut has been driven 2 ft. in a lode giving good stones of green ore; if it continues 6 ft. wide it will be paying ground to work; at present it is looking very promising.

Feb. 18: The cross-cut west San José is yet in lode matter; the lode is 18 ft. wide, with a good appearance—quartz and strong spots of green ore.

STOPS IN BACK OF RISE ON WESTERN BRANCH ABOVE TUNNEL: Jan. 28: In the south end of rise there is 3 ft. wide of black ore. We have started the men to drive south on it.

No. 2 STOPS is much the same as in last fortnight. It is one that we think will pay to work, but not leave much profit.

The Cross-cut EAST RISE: Jan. 20: 20 ft. above tunnel, is still in good black ore. In the 100 ft. level above tunnel there is 1 ft. wide of ore.

Feb. 18: The drift north of Mina Grande, 100 ft. level, has 1 ft. wide of ore.

Jan. 28: The large stope, Mina Grande, is still looking well, giving plenty of good rock for the mill.

Feb. 18: The large stope back of 12 Mina Grande is still looking well, giving plenty of ore for the mill.

Feb. 18: The pillar above tunnel, Mina Grande, is looking well; we are rising to ascertain the height of it; the length at present is 60 ft.

Jan. 28: The men are making good progress in the drift on western branch for new part of tunnel; there are stones of ore in the breast, but not sufficient quantity to value.

BENEFICIO.—Feb. 9: The four furnaces are running now pretty well, the roasting work being 30 to 36 tons per day; this gives full supply to the leaching work.

PIREWOOD.—Feb. 18: We are receiving 110 or 115 cords weekly at \$7.

SALT.—We pay \$3, all that is offered.

The directors have also received the following telegrams:—

Jan. 18: Profit for December, \$12,050.

Feb. 20: I think good arrangements can be made as to person to leave in charge.

Feb. 23: Month's profit for January, \$7500.

March: Clemen has appointed a satisfactory successor.

March 13: Profit for February, \$11,000; month's produce, February, \$40,000.

Person to leave in charge very satisfactorily arranged; contracted for one year total; will keep books and initiate new mineral superintendent.

Mr. Justice Chitty has appointed Mr. H. Woodburn Kirby (Messrs. Leslie, Kirby, Strath, and Co.), of Coleman-street, official liquidator of the German Data Coffee Company; the appointment of the Earl Poulett, and Mr. T. Fortescue Haymen not being confirmed.

HOLLOWAY'S PILLS.—ALL OUR FACULTIES.—Almost all disorders of the human body are distinctly to be traced to some impurity of the blood. The purification of that fluid is the first step towards health. Holloway's Pills recommend themselves to the attention of all such sufferers. They search out and remove all impurities from the vital fluid. In indigestion, confirmed dyspepsia, and chronic constipation the most beneficial effects have been, and always must be, obtained from the wholesome power exerted by these purifying Pills over the digestion. Persons whose lives have been restored to ease, strength, and perfect health by Holloway's Pills, after fruitless trial of the whole pharmacopoeia of physic, attest this fact. This is beyond dispute.

Registration of New Companies.

The following joint-stock companies have been duly registered:—

THE HARTLEPOOL FISHERIES COMPANY (Limited).—Capital, 50,000*l.*, in shares of 5*l.*. To work fisheries off the coast of England and elsewhere, and for towing vessels. The subscribers are—J. Rawlings, Hartlepool, 45; C. S. Todd, Hartlepool, 40; J. Callender, Hartlepool, 40; J. Tweddell, Hartlepool, 50; J. Gardner, Hartlepool, 20; S. Armstrong, Hartlepool, 20; J. Graham, Hartlepool, 10.

THE EDISON ELECTRIC LIGHT COMPANY (Limited).—Capital, 1,000,000*l.*, in shares of 10*l.*. To carry on the business of electricians, &c., in conjunction with certain acquired patents. The subscribers (who take 500 shares each) are—E. P. Bouverie, 44, Wilton crescent; Sir John Lubbock, Bart., High Elm Denn; H. Gilliat, 4, Crosby-square; W. Fowler, 38, Grosvenor-square; F. J. Bramwell, 37, St. George's-street; E. H. Johnson, 57, Holborn Viaduct; W. G. Battcham, 2, Fenchurch-avenue.

THE ECCLESTON FOUNDRY COMPANY (Limited).—Capital 20,000*l.*, in shares of 20*l.*. To purchase and continue a business established at Eccleston, St. Helens. The subscribers (who take one share each) are—J. Windus, St. Helens; G. Harris, St. Helens; W. Harris, St. Helens; G. Oldham, Southport; P. Robinson, Birkdale; J. Massey, St. Helens; H. Massey, St. Helens.

MORRIS'S AIMING AND SIGHTING APPARATUS COMPANY (Limited).—Capital 10,000*l.*, in shares of 5*l.* and 1*l.*. To carry on the business of gun and firearms manufacturers, also of ammunition, &c. The subscribers are—Earl Brownlow, Grantham, 50; Earl of Wharncliffe, Sheffield, 10; Viscount Lewisham, 55, Manchester-street, 10; Sir H. Wilmot, M.P., Chaddesden, 10; G. F. Talbot, 18, Chapel-street, 10; M. R. Smith, 1, Lombard-street, 20; R. T. Lattey, 16, Devonshire-square, 10.

THE LONDON ZINC MILLS (Limited).—Capital 20,000*l.*, in shares of 10*l.*. The acquisition and working of certain works situate in the Wenlock-road, City-road, Middlesex. The subscribers (who take one share each) are—A. R. M. Woolley, 80, St. Donald's-road; A. E. Lush, Brockley, W. Newton, 124, Camden-street; F. Edwards, 114, Camden-street; J. C. Hawart, 61, Allcroft-road; J. Ewings, Highgate; J. A. Billeat, 40, Queen's Crescent.

DUMFRIES SHIP REPAIRING AND ENGINEERING COMPANY (Limited).—Capital 12,000*l.*, in shares of 50*l.*. Carrying on the business of engineers, ironfounders, boiler makers, shipbuilders, and repairers, &c. The subscribers (who take one share each) are—H. Cloak, Cardiff; A. Thoney, Clifton; J. R. Powell, Cardiff; W. Lee, Cardiff; T. H. Owen, Cardiff; W. P. Owen, Cardiff; G. T. Baker, Cardiff.

THE PONDERS' END BRICK COMPANY (Limited).—Capital 10,000*l.*, in shares of 100*l.*. The making, working, and selling of bricks, gravel, &c. The subscribers (who take one share each) are—E. C. Kirkness, Snaresbrook; T. D. Whitehead, Forest Gate; M. M. Glover, 9, Bloomfield-street; A. Butler, Benfield; J. Gransden, Wanstead; W. Wilson, Leyton; F. C. Noble, Forest Gate.

TRIMBARAN COMPANY (Limited).—Capital 100,000*l.*, in shares of 35*l.*. To improve, manage, develop, farm, and work or otherwise deal with property, mines, minerals, and effects, which form the subject of an agreement about to be adopted and carried out by the company. The subscribers (who take one share each) are—T. Rock, 46, Leadenhall-street; T. Peck, 4, Fenchurch-street; H. M. Simons, 39, Lime-street; W. R. Winch, 4, Fenchurch-street; W. Paterson, 99, Lime-street; J. Wilson, 39, Lime-street; E. Clark, 1, Cushion-court.

THE LLYN COLLIERY COMPANY (Limited).—Capital 10,000*l.*, in share of 5*l.*. To adopt and carry into effect an agreement made between J. S. Tunnily, on the one part, and E. L. Lewes, on behalf of the company, for the acquisition of the estate, right, title, and interest in the seams of coal and fireclay known as the Yard and the Red and Old Coal Seams, situate at Nant-y-Glo, Monmouth, together with the Forge Pit and Wainhellyn Pit, with all machinery, rolling stock, plant, implements, effects, and good will of the business, for the purpose of carrying on the business of a colliery owner in all branches. The subscribers (who take one share each) are—J. S. Tunnily, Bootle, colliery owner; E. L. Lewes, Liverpool, gentleman; M. H. Larmon, Liverpool, gentleman; A. H. Holme, Liverpool, railway contractor; C. F. Smith, Liverpool, solicitor; P. Eberle, Liverpool, gentleman; J. R. Barratt, Liverpool, solicitor. The consideration given for the property is 5000*l.*, equally divided in cash and shares. The following constitute the board—Messrs. Tunnily Lewes, and Larmon, the qualification being fixed at 50 shares.

THE VAN DIEMAN'S LAND MINERALS COMPANY (Limited).—Capital 30,000*l.*, in shares of 1*l.*. Searching for, exploring, winning, and working any mines or minerals or other substances in Van Dieman's Land (Tasmania) or elsewhere, preparing, smelting, refining, manufacturing, or otherwise preparing for sale and selling all such mines, minerals, and other substances, and generally to carry on all operations of a mining and smelting company. The subscribers (who take 10 shares each) are—W. H. Gramshaw, Stock Exchange, gentleman; L. Paine, Stock Exchange, gentleman; C. G. Hale, 26, Austin-friars, stockbroker; J. Hutchinson, 15, Angel-court, gentlemen; E. Wright, Stock Exchange, gentleman; W. Ekin, Stock Exchange, gentleman; G. Wedd, Stock Exchange, gentleman. Messrs. Gramshaw, Hall, Hutchinson, T. D. Edwards, and T. J. Reeves are the first directors.

THE HARTSHILL QUARRY COMPANY (Limited).—Capital 10,000*l.*, in shares of 5*l.*. To purchase or otherwise acquire and carry on a quarrying business at Mancetter, Warwick. The subscribers (who take one share each) are—J. B. Tippetts, 4, Great St. Thomas Apostle; W. J. Tippetts, 4, Great St. Thomas Apostle; R. Neale, South Hampstead; R. Silk, Sherring; M. Jackson, 79, Warwick-street; C. E. Sharmar, Buckhurst; C. R. A. Edmonds, St. John's Wood.

ELECTRICAL POWER STORAGE COMPANY (Limited).—Capital 800,000*l.*, in shares of 10*l.*. The business of electricians and electrical, mechanical, and chemical engineers, workers, and dealers in electric motive power and light. The subscribers (who take one share each) are—Sir D. Cooper, 6, De Vere Gardens; F. G. Stuart, 14, St. James's-square; J. T. Courtney, 1, Essex-court; W. Ladd, 11, Beak-street; C. Donnan, Sydenham; W. M. Bullivant, 72, Mark-lane; F. Green, 13, Fenchurch Avenue.

YORK ENGINEERING COMPANY (Limited).—Capital 150,000*l.*, in shares of 10*l.*. To carry on the trades of engineers, iron and brass founders, smiths, railway carriage and wagon builders, &c. The subscribers (who take one share each) are—J. Close, York; J. Walker, York; J. J. Leemal, York; A. Walker, York; J. Close, jun., York; J. Pearson, York; J. Wilkinson, York.

CORRUGATED FLUES IN OCEAN STEAMERS.

The trial trip of the Stirling Castle at Glasgow on Saturday has proved her to be the fastest ocean-going steamer afloat—a result which has only been achieved by the exercise of the soundest judgment and the adoption of the most approved inventions in the market. The Stirling Castle, which was built by Messrs. J. Elder and Co. for Messrs. Skinner's steam-clipper line, is 436 ft. in length, 50 ft. beam, 33 ft. in depth, and registers 4300 tons gross. Her set of engines are of Messrs. Elder and Co.'s three cylinder type, indicating over 7000 horse-power. The sizes of the cylinders are—one of 63 in diameter, and two of 90 in., with 5 ft. 6 in. stroke. The total heating surface of the boilers is 21,160 square feet, and the grate surface 787 ft. The boilers are of Parkhead steel, and the propeller, which is made of manganese bronze, is 24 ft. 4 in. in diameter, with a pitch of 31. The measured mile was traversed six times, both with and against wind and tide, the time being 3 minutes 12 seconds to 3 minutes 13 seconds in the one case, and 3 minutes 18 seconds to 3 minutes 20 seconds in the other, representing from 18 to 18½ knots an hour, giving an Admiralty mean average of 18·418 knots, or 21·303 miles per hour. The average number of revolutions on the trial was 66½ a minute, with 100 lbs. of steam pressure to the square inch, and 23 in. vacuum. The contract speed for the vessel was 17½ knots, and the draught of water was to be 22 ft. 3 in. mean, while in reality it was 3 in. in excess of this

measurement. Notwithstanding the high speed the vessel was remarkably steady, and the vibration almost imperceptible. This was very markedly shown by filling a wine-glass with water as full as it would hold, and placing it on the saloon table. Even in the fastest run not a drop overflowed. On the previous day there was an official six hours trial of the steamer, when a run was made from Cumbrae Light to Corsewall Point. The average speed then obtained going and returning was 18·18 knots. The trials on both occasions were conducted by Mr. A. D. Bryce-Douglas, chief engineer to Messrs. Elder and Co.

The attainment of this remarkable speed is considered to be undoubtedly due to the fact of her boilers being fitted with Fox's patent corrugated flues, 36 in number, for these ensure an abundance of steam being raised and maintained with the utmost possible facility; and as a matter of fact the working pressure was kept at the 100 lbs. per square inch, almost without fluctuation. The corrugated tubes were manufactured by the Leeds Forge Company, who own the patents, and are declared to be in every respect excellent. At the luncheon on board which followed the trial Mr. Skinner, the managing owner, gave a history of the trade with China from the time when the Boston clippers and the American merchants had a monopoly of this branch of commerce to the present time. The repeal of the obnoxious tonnage laws enabled the shipowners of this country to build vessels adapted to the trade, when they entered into competition with their American rivals, and rapidly drove them out of the field. The introduction of steam in the trade was the next epoch. Messrs. Holt, of Liverpool, had a series of vessels built to go round the Cape of Good Hope at the rate of 9 or 10 miles an hour, with a small consumption of coal. These ships, along with a number of steamers built on the East Coast, were very successful, as there was nothing to oppose them; but on the opening of the Suez Canal Mr. Skinner's firm and others began to build ships of a very superior class to those of the early days. The ship is intended for bringing home the first teas, but as to the adaptability of the vessel for other purposes he had not the slightest doubt that should the Admiralty ever require such services as those undertaken by Capt. Semmes and the Alabama, she will be quite fit for them. At the same time he hoped she will be devoted to the purposes of peace. Though well suited for a cruiser she will prove of more benefit as a merchant ship. There can be no doubt that at the present time there is no ship in the navy that can in speed approach her.

WATSON BROTHERS' MINING CIRCULAR.

WATSON BROTHERS,
MINEOWNERS, STOCK AND SHARE DEALERS &c
1, ST MICHAEL'S ALLEY CORNHILL, LONDON

It is too late now to ask advice about Indian gold mines. We cautioned our readers against them, and the prices charged for them, when the *furore* first commenced. We have never touched one, nor advised anyone else to do so, and many of them are going the way we expected. The loss will not be much less than three millions; about the same amount that was lost in the gold craze of 1851, and we ventured to predict that "history would repeat itself." All mining is a complete speculation, but the Indian gold mines were introduced and prices charged for them far beyond what dividend mines in England would fetch, and hundreds of persons rushed into them who would not look at an English mine, although any person before embarking in the latter can obtain a good practical opinion of them for 2*l.* 2s.

"X." must send more particulars.

East Blue Hills is held under lease from H.R.H. Prince of Wales.

The difference between a broker and a dealer or jobber is this—a broker receives an order from a client to buy certain shares either at a limit or at market prices, and he does the business in the best way he can, charging a commission for it of so much per cent. or per share. The dealer, on the other hand, makes prices, runs risks, and brokers and others buy of him—for instance, A, a broker, receives an order for 100 shares in a mine at the market price; he goes to a dealer, and without telling him what he has to do asks him to make a *price* for 100 shares, and the dealer makes it, say 1*l.* to 1½*l.*—that is, he binds himself either to sell at 1½*l.* or buy at 1*l.*, whichever the broker chooses. If he sells to A at 1½*l.* he must wait if he has not got the shares, and gets them at the best price he can; if they go up he loses; if they remain stationary by still making the price 1*l.* to 1½*l.*, he may find another broker who is a seller, and would, therefore, get them at 1*l.* Many dealers have particular stocks in which they deal most, and support the market for them (we are not referring to mines only), and sometimes they run great risks by thus making prices, and get saddled with a large quantity of stock on a dull market. In negotiating with clients dealers do not charge commission, but supply shares at net market prices. The general rule, or it is supposed to be so, of a dealer is to buy cheap and sell dear, but as a rule he never refuses a profit, however small, trusting to quick returns rather than large gains.

A gentleman writes to ask if we know of any sale for gypsum—perhaps some of your readers may know. Formerly a large quantity was used in the potteries for vases, chimney pieces, busts, statues, &c., and about 800 tons a year were raised in Derbyshire; when exposed to heat it falls into powder, and becomes plaster of Paris. We are not aware whether much of it is used as manure. Compact gypsum or sulphate of lime consists of—lime, 32·7; sulphur, 46·3; water, 21. Phosphate of lime has 92 per cent. of lime.

West Crebor never at any time formed part of Wheal Crebor, and consequently was never separated from it. It is in a different lord's land, and the Duke of Bedford would not have allowed it to be worked in connection with Crebor. We bought the sett, therefore called it West Crebor, divided it into 12,000 shares of 5s. each, and offered the whole at *cost price pro rata* to the Crebor shareholders, taking our proportion with the rest, and we hope before very long to see a good discovery, and the shares at a better price.

D'Eresby Mountain has sampled 30 tons of lead ore this week. The No. 5 end continues worth 5 tons of lead per fathom.

The sampling at Wheal Crebor is 460 tons

At Clementina (Gwydwr Amalgamated) the east and west lode will be intersected in about 6 feet driving. The mine will shortly sell 10 tons of lead ore, and we hope, make regular returns. At Aberllyn the prospects for lead are improving.

Fifty tons of the Prince of Wales ore were burnt leavings from the tin dressing-floors, and should not have been put in as "copper" ore.

We have not time to refer to "options" this week.

A fortnight ago we expressed the opinion that spelter would soon reach 20*l.* per ton, and we observe this week that 60 tons have been sold at a public sale at an average of 20*l.* 10s. per ton.

The lode at Great West Chiverton is looking much better.

LITERARY RECORD.—The March number of Trübner's *American, European, and Oriental Literary Record* contains a highly interesting article—Germans and Hungarians—by Mr. Axel Gustafson, a native of Sweden, but a naturalised American, showing the evils of the Magyarisation of Germans now being attempted, although the Magyar race is yearly diminishing, and the Magyar language is incapable of development, poor in vocabulary, non-flexible in meaning, wholly colourless, and in every essential both inferior to the German. In connection with Sanscrit literature, it is announced that Dr. Th. Zachariae has just published a new edition of *Sāvatatana*, probably the oldest Sanscrit dictionary extant. The doctor has also in hand a new edition of Hemachandra's *Amarakosha*, with

the newly-found commentary. The obituary includes notices of Mr. R. H. Dana, Prof. John W. Draper, and Mr. Carl Louis Schwendler. The usual lists of new books are followed by list of works in preparation, and in a supplemental sheet there is an excellent biographical notice of the late Dr. John Muir.

BRITISH MINES.

The following were received to late to be inserted in their proper places:—
CARNARVON COPPER.—J. Roberts, W. Darby, March 28: In the dump at the sole of the 90 the lode continues worth 4 tons of ore per fathom. In the sole of the 80 the lode has improved during the week, and is at present 1 ton 5 cwt. of ore per fathom. In the dump at the 46 (Cae-y-groes) the lode has become poorer, and the ground a little firmer. No other change to notice since reported last week.

DRAKE WALLS UNITED.—M. Bawden, March 29: There is no alteration to notice in any of the underground operations. Saturday next being our setting-day, a full report will appear in next week's Journal.

DEBESBY MOUNTAIN.—J. Roberts, W. Sandoe, March 22: Since communicating the rise at No. 6 with the No. 5 we have, for the proper working of the end going south and the slope in the bottom of the No. 5 north, been engaged in putting in timber, and are now in full course of driving and stopping. The lode maintains its full value, as we have reported before, worth 5 tons to the fathom. The slope on the north rise is looking well, and worth from 2½ tons to 3 tons to the fathom. The north end at this level is worth 15 cwt. of lead to the fathom. We are only carrying a small portion of the lode here, and what the remaining portion may be worth we cannot say. The No. 5 end is looking better and appears to be daily improving, and there is every probability of the better part of the course of lead at the No. 5 dropping down over the end in a short space of driving. We shall get 30 tons of lead in the lead house tomorrow, which we propose sampling on Friday.

EAST BLUE HILLS.—S. Bennetts, March 29: The Baldu lode in the adit east end is 2 ft. wide, and worth 6½ per fathom. In the 40 east end it is 4 ft. wide, worth 7½ per fathom. The Pink lode in the adit east end is 1 ft. wide, containing a little copper and blende, but not much tin.

EAST LONG RAKE.—H. B. Vercoe, March 30: In the 50 west we are in a wide lode, containing spots and lumps of lead. To-morrow being the last day of the month I intend setting the men to cross-cut to the foot and hanging walls, and believe there is a good course of ore either on one side or the other. In the 50 cross-cut north, to prove the Old Long Rake lode, there is no change, the fore-breast being in a mass of carbonate of lime, spotted with lead; the footwall has not yet been intersected. In the rise of the 50 west we have a good lode of ore, but not quite so rich as last reported, now yielding 1½ ton per fathom; this rise is going up in unexplored ground, and it is not at all probable that there are hundreds of tons of lead above the roof of this level in connection with this deposit. No change in the 50 east. Dressing proceeding as usual, and we shall have a good parcel of lead to sell at the next ticketing. I purpose making some small addition to the dressing-floors to enable us to dress more ore at a less cost.

KIT HILL GREAT CONSOLS.—Isaac Richards, March 30: During the past month the tunnel level has been driven 5 fms. 3 ft., making the total distance 54 fms. A small branch or lode 6 in. wide has just been intersected, composed principally of quartz, with a little oxide of iron. The ground is of a favourable nature, and fair progress is being made in the month. In the north engine-shaft sinking below the 62, now down 7 fms. 4 ft. 6 in. the lode is 2 ft. wide, composed of a large proportion of quartz, capel, munda, and occasionally a small quantity of tin. In the 62, west of the engine-shaft, now about 20 fms. west, the lode is 2 ft. wide, composed of peach, capel, and wolfram, and is yielding some saving work of tin ore. In the 62, east of the north engine-shaft, which has reached 14 fms. 4 ft. 10 in. in that direction, the lode is 3 ft. wide, composed of capel, quartz, and munda, with a small quantity of tin ore. The surface operations—excavations for foundations of houses for engine, air compressors, &c., to drive rock-drill machinery—are being pushed on with all possible speed.

SOUTH DEVON UNITED.—William Hooper, March 30: Setting report: The 110 set of Brook engine-shaft has been driven during the past month 2 fms., set to six men at 10½ per fathom. The lode is 4½ ft. wide, with a value of 28½ per fathom. This end continues to lay open stopping ground, and so far has proved equal to anything that has been said about it, and there is every prospect as this level is extended east that most valuable discoveries will be met with. The 100 over this point and for many fathoms east beyond the 110 was driven during the past month 2 fms., set to six men at 10½ per fathom, with the lode from 150 ft. to 180 ft. fathom. With such a lode gone down in the bottom of the 100, and from the present appearances of the 110 end, we have every reason to believe that rich deposits of copper will be found, in fact, equal to any that has been made in the mine. No. 1 lode in the back of this level is set to six men at 3½ per fathom, the lode is 4 ft. wide, with a value of 9½ per fathom. No. 2 do., set to six men at 3½ per fathom; the lode is 3½ ft. wide, with a value of 9½ per fathom. The lode in the winze sinking in the bottom of the 100 east of Brook shaft is worth 5½ per fathom. Contact here not to be communicated to the 90, the lode in the back of the 110 we expect this to be communicated during the present month, when good ventilation will be given to this part of the mine. The lode in the rise in the back of the 100 against Martin's shaft is of a very promising character, being fully 4 ft. wide, with a value of 5½ per fathom. The rise is up about 4 fathoms, and the men are doing good duty. We hope to communicate this point with the winze sinking in the bottom of the 90 during the month, when the men will be put immediately to drive the 100 and 90 ends, and from their very promising appearance I have not the slightest doubt, but what vast discoveries will be made. The winze in the bottom of the 90 has been sunk during the past month 2 fathoms. The lode is 4 ft. wide, composed of quartz, munda, and stones of copper ore. We expect an early improvement here, from the fact of the lode in the rise being worth 5½ per fathom. As stated above, we hope to communicate this against the rise in the course of the month, when we shall be in a position to commence a rise in the back of this level against Martin's shaft. This work will have our best attention, and be pushed on with all possible force. The slope in the back of this level, the 90, is set to two men at 7½ per fathom; the lode is 3 ft. wide with a value of 5½ per fathom. The 80 east of Brook engine-shaft has been driven during the past month 1 fathom, set to two men at 7½ per fathom, the lode is 5 ft. wide, composed principally of spar and munda with spots of copper ore. No. 1 lode in the back of this level is set to six men at 5½ per fathom; the lode is 5 ft. wide, with a value of 7½ per fathom. No. 2 do. is set to six men at 6½ per fathom; the lode is 5 ft. wide, with a value of 7½ per fathom. No. 3 do. is set to eight men at 6½ per fathom; the lode is 4 ft. wide, with a value of 7½ per fathom. The adit level west of Old Bump shaft has been driven during the past month 2 fathoms, set to two men at 5½ per fathom; the lode is 4 ft. wide containing spar, munda, and spots of copper ore; there is little or no change in the character of the lode, still presenting its most promising appearance, containing all the necessary components for producing large quantities of copper ore as depth is reached. Pickstones Shaft: The men have nearly completed the repairing of skip road, and are now engaged clearing down the shaft and getting the lift of pumps ready preparatory to fixing them in their places. Martin's Shaft has been sunk during the past month 2 fms. 2 ft., making a total depth from surface of 23 fms. 1 ft. 6 in.; the men have not as yet completed their contract of 10 fathoms, therefore no alteration in the price of sinking takes place this time; the ground is of the finest description, being of a beautiful light kilas, and the men are doing good labour. Knowing the shaft to be of very great importance, it is being pushed on with all possible force. Our hauling and dressing operations are continually kept going, and, as already stated, nothing more can be done before other hauling power is erected, and Martin's shaft communicated with the levels below, when the samplings will be greatly increased; we have large reserves of ore in the mine to be stopped away.

WEST OREBOR.—J. Andrews, March 29: The casing of the shaft and the ladder road is completed, and the shaft is again in regular course of sinking by nine men in favourable ground for progress, but as yet there is no change in the lode.

WEST HOLWAY.—R. Rowlands, March 30: In the sinking of the new shaft the lode continues of the same strength as previously reported. There is a nice mixture of lead in the heading side of the lode. In the driving of the 100 the lead is improved, now that we have passed the disturbance caused by the swallow. I have no further change to report at present in the other bargains, which are as some time past.—Ramshart: We have got through another joint in the fore-breast, and I hope soon to say that we have the lode.

WEST VOR AND LEEDS.—S. Harris, March 30: The adit level driving east of cross-cut on Boxen lode continues about 5 ft. wide, very good, with arsenical munda and a little copper, and sufficiently productive for tin to be remunerative had we stamps on the mine, but in extending the level east towards the Old Wheal Vor Mine we have had some back, therefore we cannot expect to meet with any great improvement without going deeper, at the same time it is very necessary that this adit level should be continued even to the boundary of the sett for drainage, ventilation, &c., and for the permanent working of the mine.

IMPROVED MINERS' CARTRIDGES.—In cartridges as ordinarily made the powder is apt to be driven out of the bore hole in part unconsumed. To obviate this air spaces or chambers are left in the cartridge, or round it in some cases; but air is not near so effective as oxygen, as the latter combines more quickly with the carbon. A passage too right through the centre of the cartridge, open to every surrounding part, yet filled with oxygen, is, in the opinion of Mr. William Hogarth, of Southport, theoretically the most perfect form of air space possible. He places a glass bottle or other cylinder of fragile but perfectly impervious material in the centre of the cartridge, forming a central core and filled with oxygen at atmospheric or higher pressure, hermetically sealed. The concussion of ignition immediately smashes the bottle to fragments and forms a central space for the gases and unconsumed powder to rush in and mix and combine with the oxygen already there. If desirable there can be several glass cylinders variously placed instead of one.

RE-STARTING OF THE NORTH YORKSHIRE IRONWORKS.—These works, situate at South Stockton, are to be recommenced immediately, under the name of the South Stockton Iron Company. The principal kind of iron to be manufactured will be puddled bars, balbs, T's, and angles, and it is intended to commence with 24 puddling furnaces. Ald. J. Richardson, of Potter Hall, is chairman of the company, and Messrs. C. A. Head, J. P. Mark Robinson, and W. Anderson constitute the board of directors. Mr. H. Smith is appointed secretary, and Mr. David Harrison, from the Elsecar Ironworks, near Barnsley, has been appointed practical manager.

TUBES

SILVER MEDAL (HIGHEST AWARD) MELBOURNE, 1881.

JOHN SPENCER,

Tube Works, West Bromwich, and 3, Queen Street Place, LONDON, E.C.

FIRST PRIZE, SYDNEY, 1880.

TUBES AND FITTINGS for Gas, Steam, and Water; Galvanised, Enamelled, and Hydraulic Tubes; Boiler Tubes and Fittings; Gas Fitters' Tools; Brass Cocks, &c.

ANTI-CORRODIO TUBES AND FITTINGS COATED BY BARFF'S RUSTLESS PROCESS.

SIX PER CENT. DEBENTURES AT 98.

The Yorke Peninsula Mining Company

(LIMITED).

CAPITAL { 75,000 ORDINARY } SHARES OF £1 STERLING EACH.

FREDERICK PETERSON WARD, Esq., CHAIRMAN.

DIRECTORS.

RICHARD BYAM OTTLEY, Esq.
FREDERICK P. WARD, Esq.

COMMITTEE OF INSPECTION IN AUSTRALIA.

The Hon. Sir THOMAS ELDER, M.L.C., Adelaide.
The Hon. Sir JOHN MORPHEIT, M.L.C., Adelaide.

The directors of this company are prepared to receive applications for the unallotted portion (£14,000) of a total of £25,000 of debentures authorised to be issued at the price of 98 per cent., in sums of £100, or multiples thereof. Interest at the rate of 6 per cent. per annum will be payable on the debentures half-yearly, on 1st January and 1st July in each year by warrants on the company's bankers.

The debentures will be repayable on 31st December, 1886, at par, the company reserving the option to pay any of them off at par on any prior 31st of December after 1883.

Forms of Application, with all further information, may be obtained at the office of the company, 50, Old Broad-street, London, E.C. By order of the Directors, C. GRAINGER, Secretary.

50, Old Broad-street, London, E.C., 31st March, 1882.

EUREKA (NEVADA) MINING DISTRICT.

SIR,—I have the pleasure to enclose my usual budget of news received from this mining centre:—

The Eureka Consolidated during the month of February shipped \$68,801.73 in bullion.

Eureka Consolidated is again, within a fraction, the boss of the stock market. A dividend for March is among the possibilities.

The little difficulty between the tributors and the Richmond Company has had the effect of bringing numbers of Ruby Hillers down to town.

A letter from London States that Mr. Rickard, formerly superintendent of the Richmond Company, has been appointed manager of the Ruby and Dunderberg Company.

Extensive mining operations will soon be commenced by the Ruby and Dunderberg. The company has been put on a permanent cash basis.

London, March 30. RUBY HILL.

EUREKA (NEVADA).—This week's report shows that good progress has been made in drifting on the east cross-cut in favourable ground (Bald Eagle); connection will be made with the old stopes when about 30 ft. further have been worked. Shipments from the Williamsburg were 20 tons.

SALES OF COPPER ORES.

COPPER ORES SOLD AT THE CORNWALL TICKETINGS, FOR THE QUARTER ENDED MARCH 31, 1882.

Mines.	Tons.	Amount.
Mellanear.....	1725	£5482 15 0
Wheal Jewell.....	292	594 1 0
East Pool.....	150	477 3 0
East Uny.....	50	351 1 6
West Tolgus.....	163	895 5 6
Violet Seton.....	135	531 12 0
West Seton.....	64	341 2 9
Wheal Ury.....	65	111 5 0
Mounts Bay Consols.....	20	76 0 0
Devon Great Consols.....	3063	6763 6 6
Wheal Crebor.....	515	1450 2 0
South Caradon.....	1210	5567 15 0
South Devon United.....	329	855 18 0
Marke Valley.....	495	1447 10 6
Glasgow Caradon.....	160	639 14 0
Gawton Copper.....	202	198 2 0
Phoenix.....	30	158 5 0
New Cook's Kitchen.....	75	281 0 0
Carn Brea.....	48	130 16 0
Gunnislake (Clitters).....	809	4651 19 0
West Caradon.....	83	372 19 0
Bedford United.....	40	113 0 0
Mid Devon.....	33	273 0 6
Princes of Wales.....	112	239 2 0
Holmshush.....	22	252 16 0
East Caradon.....	65	271 18 6
New West Caradon.....	35	133 17 6
Calstock and Danescombe.....	6	39 0 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Mines.	Tons.	Amount.
Vivian and Sons.....	2518	£3,623 5 6
Grenfell and Sons.....	2136	6,390 11 0
Neveill, Druce, and Co.....	2023	5,425 19 3
Williams, Foster, and Co.....	2531	9,123 11 9
Mason and Elkington.....	797	2,527 9 6
Total.....	10095	£32,080 17 0

COPPER ORES SOLD AT THE SWANSEA TICKETINGS, FOR THE QUARTER ENDING MARCH 31, 1882.

QUARTER ENDING MARCH 31, 1882.			
Mines	BRITISH.	Tons.	Amount.
Berehaven.....	222	£1,066 1 0	
Crousehan.....	6	122 12 6	
Tigrony.....	5	85 12 6	
Total.....	233	£1,274 6 0	
COLONIAL.			
Betta Cove.....	480	£2,412 0 0	
FOREIGN.			
New Quebrada.....	143	£ 940 4 6	
Garonne.....	92	526 14 0	
Total.....	235	£1,468 18 6	
RECAPITULATION			
British.....	233	£1,274 6 0	
Colonial.....	480	2,412 0 0	
Foreign.....	235	1,468 18 6	
Sundries.....	22	723 0 6	
Total.....	970	£5,875 5 0	

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Mines.	Tons.	Amount.
P. Grenfell and Sons.....	12	£ 211 5 0
Williams, Foster, and Co.....	235	1,917 12 6
Landore Copper Company.....	380	1,891 0 9
Cwmavon Estates Company.....	363	1,856 6 9
Total.....	970	£5,875 5 0

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
March 20—	Kirkmichael.....	20	£ 9 1 0	Nevill, Druce, & Co.
24—	Grogwinion.....	50	9 10 6	Walker, Parker, & Co.
25—	Foxdale.....	100	10 2 0	Panther Lead Co.
26—	Bryn-yr-Af.....	20	9 0 0	ditto
29—	Frongoch.....	100	9 0 0	Nevill, Druce, and Co.
—	Van.....	160	10 18 6	Walker, Parker, & Co.
—	ditto.....	40	11 1 6	ditto
—	Pandora.....	24	9 2 6	ditto
—	Goginan.....	50	12 18 6	Goodhart and Co.
—	Roman Graves.....	50	9 11 6	Walker, Parker, & Co.
—	ditto.....	50	9 15 0	Runcorn Smelting Co.
—	ditto.....	50	9 14 0	ditto
—	ditto.....	50	9 15 6	J. H. Moore.

BLENDE.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
March 23—	Cwmystwyth.....	30	£ 3 11 0	Dillwyn and Co.
29—	Pierrefitte.....	80	3 5 6	Villiers Spelter Co.
29—	Frongoch.....	100	2 19 0	Dillwyn and Co.
—	ditto.....	50	2 5 0	ditto
—	Van.....	120	2 8 0	J. P. Kimmel.
—	Pandora.....	35	1 12 6	Swansea Vale Co.

MOUNTS BAY CONSOLS.—The unwatering of the Sydney Cove Mine continues. In the north part of the sett known as the Sydney Godolphin portion four rich tin lodes have been discovered, from which, as will be seen from the report published to-day, large quantities of tinstuff can be raised above adit sufficient, Captain Argall reports, to make large returns for some years, and to give work for 48 heads of stamps.

RUBY AND DUNDERBERG.—The weekly telegram advises that the ore body in the cave below the 700 ft. level in the Dunderberg Mine continues to look well, and 150 tons of ore are ready for shipment from this mine. The detailed report, March 6, giving an interesting account of the recent discovery, will be found elsewhere, and should receive careful attention from those interested. Monday next has been appointed a special settlement day for the new shares.

EAST WHEAL ROSE.—No. 1 stope on Inne's lode continues to produce good silver-lead and blende. The engineers, Messrs. Loam and Son, are only waiting for the delivery of some long promised parts of the 90-in. engine to start the pumping at Penrose's shaft. Messrs. Harvey have promised to deliver these parts at once.

BWLCH.—The agent reports a sudden and favourable change in the stratum of the 50 fathom level driving east, south lode. There is a large section of virgin ground at this point. The former deposit or shoot of ore on this lode gave heavy returns from the 60 fathom level under adit to within 14 fathoms of surface. Another parcel of silver-lead ore will be sold early next month, assaying 80 per cent. of lead and 18 ozs. of silver to the 20 cwt.

CARNARVONSHIRE GREAT CONSOLS LEAD.—We are informed that under the able and energetic management of Capt. Borlase the progress of this mine has been equal to all the anticipations entertained by its most sanguine supporters, who have stood by it from the first, and whose belief in its ultimate great success has never for one moment been shaken. The agent writes to-day—"Having formed an opinion that the late drive at the 8 fathom level below adit west of diagonal shaft had been driven alongside of the lead bearing part of the lode, he yesterday put two men to cut into the hanging wall, and they have met with a branch of lead that will produce 3 tons of ore to the fathom," sample of which may be seen at Messrs. Edeane's offices. He also adds, which should be gratifying to the shareholders, that he has again 30 tons of lead ore for sale next week, showing that under the new management regular sales are taking place. The shaft is now down to the required depth to put out a new level, and when the lode is met with the success of the mine should be an established fact. That there is a great future for this undertaking every practical miner who has visited it entirely agrees.

WEST VOR AND LEEDS UNITED.—Most of us have frequently seen in our experience that with the same opportunities and conditions one man might fail where another achieved a great success. Of course without the necessary conditions of success no undertaking or project of any description could possibly prosper, and even under the most favoured circumstances success always depended upon the management. It must, therefore, be a source of satisfaction and inspire great confidence to the shareholders in this company, that they have secured the services of Capt. Harris as manager at their mine—which contains all the necessary elements of success—who for many years had the management of the Great Wheal Vor, which was the most noted tin mine in the world, and the unparalleled success of which he was partly instrumental in bringing about. His reputation as a mining expert is established throughout Cornwall, as also his unimpeachable character, and it is well known that his statements are always under the mark. His reports on this property are most convincing and reassuring; in one of which he states, after referring to the richness of the different lodes, and advising the erection of a 70-in. pumping engine in the engine house already built, "Steam stuff would also be required at once, as large quantities of tin stuff would be available as soon as the 30 fathom level was reached. . . . In addition to the tin and copper, there is an extensive bed of arsenical munda, in which there would be no difficulty in raising 100 tons of good quality arsenic per month, this with the tin would give good profits from this lode alone." To forecast profits in mining is in too many cases illusory and productive of much harm to mining interests, but taking everything into consideration with regard to the property, the fact of its having been a part of the Great Vor sett, and always looked on as the most promising undeveloped portion of same, the proved productiveness of the lodes, which are improving in depth, the brilliant results already achieved from shallow points, and the smallness of the capital of the company, it is more than probable after the pumping machinery is successful in draining the deeper rich workings a return of all the original capital invested will be made in the shape of dividends within a comparatively short time.

MUNTZ METAL COMPANY.—The annual meeting of shareholders was held on Monday at Birmingham, Mr. Jaffray presiding. The directors' report showed that the profit on the past year's transactions amounted to 28,585. Adding the amount brought forward from last year there was a disposable balance of 35,646. An interim dividend at the rate of 7½ per cent. per annum was paid on June 30, and the directors now propose to divide a further sum of 11,173. amongst the shareholders, making a dividend for the whole year of 10 per cent. The report was adopted, and the dividend declared as recommended.

MAP OF CANADA.—A large scale chromo-lithographed map of Canada showing the position of the Great Western and Grand Trunk Railways has been prepared by Mr. William Abbott, F.R.G.S., of Tokenhouse Yard. At the present time, when the question of the fusion of these two companies is causing a considerable amount of interest, such a map must be invaluable to shareholders in either concern, and Mr. Abbott may be congratulated upon the clear and striking manner in which he has indicated the ground covered by each enterprise.

THE QUEEN OF THE MOUNTAIN LEAD MINING COMPANY (LIMITED).

These mines are situated on the eastern side, but near the centre, of the justly celebrated and well-known Halkyn Mountain, in the parish of Halkyn, Flintshire, North Wales.

Capital £40,000, in 20,000 Shares of £2 each.

Issue of 8723 Shares of £2 each at par, 11,277 having already been allotted. 5s. per share payable on application, 5s. on allotment, and the balance as required in calls of not more than 2s. 6d. per share, at intervals of not less than two months.

The company having purchased and taken over the South Prince Patrick Mines, and having also acquired further mineral rights in addition to their own, now offer for subscription the unallotted shares.

The directors specially wish to draw the attention of intending investors to the prospects of this property.

The Prospectus, Reports, and leave to inspect the Mine, can be obtained from the Secretary,—

J. LANCASTER, 13, CASTLE STREET, LIVERPOOL.

MESSRS THOMPSON AND SON, OLD TOWN STREET, PLYMOUTH (Established 27 years), have FOR SALE the undermentioned SHARES, for which offers are requested, viz.:—100 Mounts Bay Consols, 250 Standard Bank of London, 50 East Wheat Rose, 25 West Wyke Valley, 20 Pen-y-Oraedd, 75 Royalton, 50 Pelyn Wood, 50 Lady Bertha, 70 Sortridge Consols, 150 Treavean, 100 Bodidris, 20 Kopp's Extract of Meat, and numerous other shares, a list of which will be sent on application.

MR. THOMAS WOODWARD, STOCK AND SHARE BROKER, TRURO.

T. W. can supply a few shares in a Tin Mine just about the point of a good discovery, which is nearly certain to cause a great rise in value of shares. Good for any amount. Immediate application necessary.

JOHN THOMAS, STOCK AND SHARE BROKER.

(On commission only.)

Mines inspected and faithfully reported on. Mining Machinery valued.

Estimates given for the erection of Mining Plant.

Twenty Years' Experience.

Advice given as to Buying or Selling Mine Shares.

Address—REDRUTH, CORNWALL.

THOS. THOMAS, MINERAL AGENT AND ASSAYER
COPPER ORE YARD, STRAND, SWANSEA.
Is prepared to receive Samples for Assay and Analysis, or Consignments of Ore, for Sampling and Sale. Works and Mining Requirements Supplied. Best Furnace Material, Steam or Stone Coal, secured for shipment. Large Experience in Works and Treatment of Minerals.
Upwards of Sixteen Years with one of the Largest Firms in the Ore Trade. References Given.

MR. W. TREGELLAS, 40, BISHOPSGATE STREET WITHIN, E.C.
Deals in all descriptions of STOCKS and SHARES at close market prices. He strongly recommends the immediate purchase of GOLD HILL Mine Shares and BRAZILIAN GOLD Mine Shares, which are safe to have a great rise. Full information on application personally or by letter.

MR THOMAS CORNISH, CONSULTING MINING ENGINEER AND FINANCE AGENT.
Twenty-five Years Practical Experience in Australian Gold Mining and Management.
Advice on Gold Mining Investment.
Author of "Gold Mining: Its Results and its Requirements."
21, FENCHURCH STREET, LONDON, E.C.

MINING ENGINEER.

ALEX. DEL MAR.

Mining Engineer, late Director of the United States Bureau of Statistics, Mining Commissioner for the United States Monetary Commission, &c., 216, SANBOME STREET, SAN FRANCISCO: Cable address—"Delmar, San Francisco." Branch Office, 61, Broadway, New York: Cable address—"Delmar, New York." London Agency, H. Stipes and Co., 24a, Southwark-street, S.E.: Cable address—"Delmar, London." Paris Agency, J. H. McDonald and Co., 13, Rue St. Lazare: Cable address—"Delmar, Paris."

FOR SALE.

RICH AND VALUABLE MANGANESE MINES.

Address, "T," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

THE ALLEN STEAM ENGINE GOVERNOR develops the utmost Power, gives Uniformity of Speed under varying loads, and Economises Fuel.

PEET'S PATENT VALVE TAP, for Steam, Water, and Gas, from $\frac{1}{2}$ inch upwards. Simple, durable, double seats, full way, and all parts interchangeable.

For particulars, apply to—

WHITLEY PARTNERS, RAILWAY WORKS, HUNSLET ROAD, LEEDS.

CENTRAL AMERICAN MINES.

WILLIAM SMEDDLE, M.E., Libertad, Department of Chontales, GREYTOWN, NICARAGUA, (25 years practical experience in Gold Mining—16 in Australia and 9 in Central America) is prepared to EXAMINE and REPORT ON MINING PROPERTIES IN CENTRAL AMERICA. Advice as to the best class of Machinery for working same, &c.

For terms apply direct; or to Messrs. SMEDDLE and Co., Shildon, Darlington.

VALUABLE ANTHRACITE COLLIERY, 982 Acres. Estimated coal unworked 20,000,000 tons; thick seams; can be worked at unusually low cost into truck. Valuable fire-clay seams. Shipping ports, Swansea, Britonferry, and Port Talbot.

For particulars, address J. RANFIELD, Swansea.

MINE "EL CALLAO," GUAYANA, VENEZUELA

COUPONS OF SHARES 322

Gold in bars produced in the month of February, 1882, and re-mitted to Messrs. Baring Brothers and Co., London, 11, 183-08 ozs.

DIVIDEND distributed for each coupon, \$400.

(Signed) A. LICIONI, President.

(Signed) G. BARNEWITZ, Treasurer.

MONMOUTHSHIRE.

THE LLANDAVEL, CWM, AND NEW CWM COLLIERIES.

THESE VALUABLE HOUSE COAL COLLIERIES, with the modern PLANT, MACHINERY, RAILWAY WAGONS, &c., will be offered FOR SALE, by AUCTION, as a going concern, in One Lot, by

Messrs. WILLIAM GRAHAM, SON, and HITCHCOX.

At the King's Head Hotel, Newport, on Wednesday, the 26th day of April, 1882, at Three o'clock precisely.

For particulars of sale and permission to view, apply to the Auctioneers; or to Messrs. COLBORNE and WARD, Solicitors, Newport, Monmouthshire.

COLLIERY FOR SALE.

A RARE OPPORTUNITY FOR INVESTORS WITH CAPITAL.

A COAL MINE, with One Million and a-half TONS of COALS opened out and proved ready for putting to surface, with all MACHINERY, PLANT, sidings, underground rails, and all modern appliances, together with FREEHOLD LAND, BUILDINGS, TWO SHAFT ENGINES, gear, FIVE large BOILERS, &c. The Mine is perfectly free from water and gas, and miners could be set to work the day after the deposit money was paid. This is a genuine concern, and the best reason can be given for its being in the market. Full particulars and orders to view can be obtained from Mr. JOSEPH STARKER, 3, Jackson Chambers, 21, South Castle-street, Liverpool.

TEN PER CENT. DEBENTURE BONDS, amply secured on undebatable security. A very favourable opportunity for investing money. A safe investment.

Full particulars from Messrs. THOMPSON and SON, Plymouth; or G. FOUCHER, Stock Broker, 44, Mildmay Chambers, London, E.C.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACTS, 1862 to 1880, and of the CALLINGTON CONSOLS (LIMITED).
Notice is hereby given, that a PETITION for the WINDING-UP of the ABOVE-NAMED COMPANY by the Court, was, on the 25th day of March instant, presented to the Vice-Warden of the Stannaries by FREDERICK JONES, of Albert Terrace, Church Road, Upper Norwood, in the County of Surrey, Wine Merchant, claiming to be a creditor of the said company, and that the said Petition is directed to be heard before the Vice-Warden, at the Law Institution, in Chancery-lane, London, on Monday, the 17th day of April next, at Three o'clock in the afternoon.

Any contributory or creditor of the company may appear at the hearing and oppose the same, provided he has given at least two clear days' notice to the Petitioner, his solicitor, or their agent, of his intention to do so, such notice to be forthwith forwarded to Sir PHILIP PATHERICK SMITH, Knight, Secretary of the Vice-Warden, Truro.

Every contributory or creditor is entitled to a copy of the petition and affidavit verifying the same from the petitioner, his solicitors, or their agent, within 24 hours after requiring the same, on payment of the regulated charge per folio.

Affidavits intended to be used at the hearing, in opposition to the petition, must be filed at the Registrar's office, Truro, on or before the 15th day of April next, and notice thereof must, at the same time, be given to the petitioner, his solicitors, or their agent.

P. HEARLE COOK, Truro, Cornwall,
Agent for Snell, Son, and Greenip, 1, George-street, Mansion House,
London, E.C., Petitioner's Solicitors.

Dated Truro, the 29th day of March, 1882.

In the High Court of Justice.—Chancery Division.

1882, B., No. 939

IN the MATTER of the COMPANIES ACTS, 1862 and 1867, AND IN the MATTER of the BERLANGA AGENCY COMPANY (LIMITED).

THE CREDITORS of the above-named company, who have not already been allowed as creditors by the liquidator of the said company, are hereby required, on or before the 12th day of April, 1882, to SEND their NAMES and ADDRESSES, and the particulars of their DEBTS or CLAIMS, and the names and addresses of their solicitors, if any, to Mr. ARTHUR ABRAHAM LKYY, of 110, Fenchurch-street, in the City of London, England, Gentlemen, the Liquidator of the said company, and if so required by notice in writing from the said liquidator, are, by their solicitors, to come in and prove their said debts or claims at the chambers of Mr. JUSTICE FRY, situate No. 12, Staple Inn, Holborn, in the County of Middlesex, England, at such time as shall be specified in such notice, or, in default thereof, they will be EXCLUDED from the BENEFIT of any DISTRIBUTION made before such debts are proved.

Tuesday the 25th day of April, 1882, at Twelve o'clock at noon at the said Chambers is appointed for hearing and adjudicating upon the said debts and claims.

FRESHFIELDS and WILLIAMS, 5, Bank-buildings, London, E.C., Solicitors for Official Liquidation.

Dated this 21st March, 1882.

WELLINGTON FOUNDRY, MIDDLESBOROUGH.
TO BE SOLD, BY AUCTION, at the Queen Hotel, Middlesborough, on Tuesday, April 18th, 1882, at Two for Three o'clock in the afternoon (C. WELLMAN, Auctioneer), the WELLINGTON FOUNDRY and its belongings, situate at Middlesborough, in the County of York.

For particulars and conditions of sale, apply to the Auctioneer; or to Messrs. HUNTON and BOLSOVER, Solicitors, Stockton-on-Tees.

MOUNT CASHIEL IRON ORE MINES, CO. ANTRIM, IRELAND.
The Advertiser solicits an OFFER for the WHOLE or PART of TWENTY fully paid-up £100 shares.

Address, "G. W. B.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

FOR SALE:—
ONE 50 inch and ONE 40 inch PUMPING ENGINES, with BOILERS and FITTINGS.
ONE 22 inch ROTARY ENGINE.
ONE 12½ inch HORIZONTAL ENGINE, with CAPSTAN and HAULING MACHINE attached.
All the above Engines are in first-class condition.
Several WATER-WHEELS, from 20 to 60 feet diameter. STAMPS' AXLES, and a large quantity of SECONDHAND MINING MATERIALS.

Apply to J. and H. PEARCE, TAVY IRONWORKS, TAVISTOCK.

FOR SALE, a 30 H.P. PORTABLE STEAM ENGINE; with link-motion reversing gear, has drum and gearing complete for winding and pumping.
A 14 H.P. PORTABLE WINDING AND PUMPING ENGINE.
Also a 6 H.P. PORTABLE HOISTING ENGINE.

Apply to—
BARROWS and STEWART, ENGINEERS, BANBURY.

SECOND-HAND, BUT EQUAL TO NEW:—
STEAM BOILERS.—Three first-class Boilers, 30 ft. by 7 ft., two flues, Galloway tubes in, and fittings, four years old, insured at 75 lbs. pressure. Will be sold cheap.

BOILERS.—Two Boilers, 28 ft. by 7 ft., two flues. Been working at 65 lbs. Price on rails, £130 each.

Other sizes of Boilers in stock, in excellent condition, 28 ft. by 7 ft., 24 ft. by 7 ft., 24 ft. by 6 ft., 20 ft. by 5 ft., 15 ft. by 5 ft., and 12 ft. by 5 ft. Safe for 65 and 60 lbs. pressure. Very cheap.

PUMPING ENGINES.—Beam and Horizontal. Diameters of cylinders, 100 in., 90 in., 65 in., 60 in., and 38 in. Very cheap.

WINDING ENGINES and COLLIERY PLANT of every description, second-hand, in stock.

H. HELLEWELL and CO., 4, NORTH CORRIDOR,
ROYAL EXCHANGE, MANCHESTER.

TO BE SOLD, a SECONDHAND 12-H.P. PATENT ROBEY MINING ENGINE and LOCOMOTIVE BOILER combined, with 5 ft. WINDING DRUM and PUMPING CRANK.

Further particulars and price on application to ROBEY and Co., Globe Works, Lincoln.

SOUTH AFRICA (KIMBERLEY) DIAMOND FIELDS.

INVESTORS desirous of getting AUTHENTIC and RELIABLE INFORMATION on the DIAMOND FIELDS in the above Region, can procure the same through the Agency of Mr. JOHN HOCKING, Engineer, Trewirgie-road, Redruth.

THE LINARES LEAD MINING COMPANY (LIMITED).

Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of the shareholders of this company will be HELD at this office, on THURSDAY, the 6th April next, at One o'clock P.M.:

To receive the accounts, balance-sheet, and reports of the directors, auditors, superintendents, and mining agents, for the half-year ending 31st December, 1881.

To elect two directors in the place of Robert Henty and J. P. Judd, Esqs., who go out of office by rotation. They are both eligible, and offer themselves for re-election.

To appoint two auditors for the ensuing year. Edward L. Agar and William Carter, Esqs., who are eligible, offer themselves for re-election.

And for general business, as authorised by the Deed of Settlement.

By order of the Board, H. SWAFFIELD, Secretary.
5, Queen-street-place, Upper Thames-street, London, E.C., 29th March, 1882.

THE FORTUNA COMPANY (LIMITED).

Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of the shareholders of this company will be HELD at this office, on THURSDAY, the 6th April next, at half-past One o'clock P.M.:

To receive the accounts, balance-sheet, and reports of the directors, auditors, superintendents, and mining agents, for the half-year ending 31st December, 1881.

To elect two directors in the place of Robert Henty and John E. Pell, Esqs., who go out of office by rotation. They are both eligible, and offer themselves for re-election.

To appoint two auditors for the ensuing year. E. J. St. John, Esq., and Richard Donagan, Esq., who are eligible, offer themselves for re-election.

And for general business, as authorised by the Deed of Settlement.

By order of the Board, H. SWAFFIELD, Secretary.
5, Queen-street-place, London, E.C., 29th March, 1882.

THE ALAMILLOS COMPANY (LIMITED).

Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of the shareholders of this company will be HELD at this office, on THURSDAY, the 6th April next, at Two o'clock P.M.:

To receive the accounts and balance-sheet, with reports from the directors, auditors, superintendents, and mining agents, for the half-year ending 31st December, 1881.

To elect two directors in the place of John Philipps Judd and John Robinson Pell, Esqs., who go out of office by rotation. They are both eligible, and offer themselves for re-election.

To appoint two auditors for the ensuing year. Edward J. St. John and William Carter, Esqs., who are eligible, offer themselves for re-election.

And for general business, as authorised by the Articles of Association.

By order of the Board, H. SWAFFIELD, Secretary.
5, Queen-street-place, Upper Thames-street, London, 29th March, 1882.

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DONKEYS—One 8 x 10 x 4½; one 6 x 3½; one 10 x 8 x 6.

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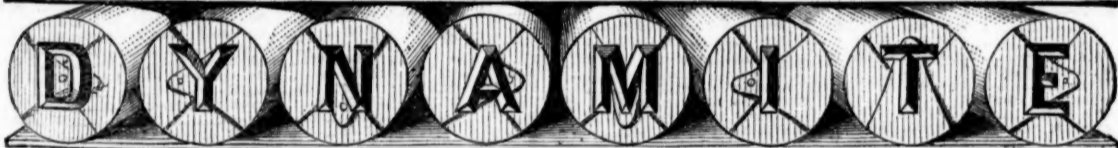
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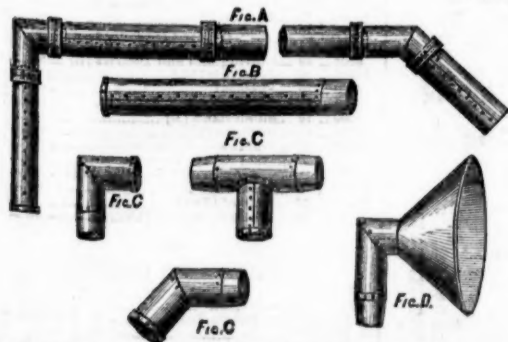
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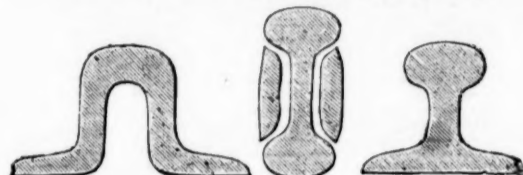
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